NAVAL POSTGRADUATE SCHOOL
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THESIS

AN ANALYSIS OF TIME DISTRIBUTION AND
WORK LOAD IN THE AREA OF
INDIVIDUAL TACTICAL DEVELOPMENT

by

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December 1983

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An Analysis of Time Distribution and Work Load in the Area of Individual Tactical Development

by

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ABSTRACT

The U.S. Navy is a group of people organized to meet a common purpose. One of the Navy's purposes (Missions) is combat warfare to protect and defend the United States of America. Therefore, it is vital that Naval officers in operational billets assigned to ships, submarines, aircraft squadrons, and afloat staffs maintain the highest degree of readiness and tactical expertise. Analysis of survey data obtained from air warfare officers indicates that time distribution and work load can have an important impact in the area of individual tactical development. The results showed, in particular, that officers perceived there was insufficient availability of time to develop individual tactical competency.

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I. INTRODUCTION

A. BACKGROUND

The U.S. Navy is a group of people organized to meet a common purpose. One of the Navy's purposes (missions) is combat warfare to protect and defend the United States of America. The Navy's line officer must be tactically competent in order to achieve this mission.

Over the past two decades, there have been extraordinary technical improvements in the Navy's sensors and weapons systems. In fact, this technical explosion has been so significant that we are now on the threshold of completely revolutionizing modern Naval Warfare. Our ships and aircraft have more warfighting capability today than ever before in the history of the Navy. Tactical exploitation of the environment has never been so vitally important or so complex.

Because of resource limitations, we must focus our attention on the management of assets. It follows, therefore, that superior tactical management of forces in battle requires properly trained personnel, equipment that works, effective policies and well organized, clearly promulgated procedures. If we are to be successful in a maritime engagement today, the decisive factor will be to maintain the tactical advantage. To gain this advantage, we must be tactically competent.

Tactics is an art and tactical decisions are based on study, practical experience, tactical savvy and personal ingenuity. Tactical competence is a creative, cultivated process.

Improving tactical readiness has been an issue of concern for many top level Naval Officers for some time. As a result, the Office of the Chief of Naval Operations has directed that a survey be conducted to determine how line officers divide their time between various responsibilities. Pretesting of the survey requested has been completed (May 1983) by LT Francis Drogowski, USN. The initial pretest survey vehicle was designed by LT Drogowski and CDR Martin Newman USN. The second vehicle is presently being administered by Dr. Robert Morrison, together with CDR Newman, of the Navy Personnel Research and Development Center, San Diego, California. The pretest vehicle was administered randomly to five hundred (500) Air Warfare Officers. The objective of the pretest survey as well as the parent vehicle is to achieve insight into factors that Naval Officers in operational billets perceive as enhancing or constraining their opportunities to learn and practice tactical employment of their weapons and combat systems (Drogowski, 1983).

The pretest survey vehicle consisted of 202 close-ended questions and was self-administered to Naval Aviators assigned to ships, submarines, aircraft squadrons, and afloat staffs.

The parent vehicle consists of 172 questions, is self-administered, and has been distributed to 4000 Naval Officers of various designators, all assigned to operational billets. Survey design, methodology, computer programs written for analyses, feedback comments received on attached comment sheets, and preliminary results have been published in a recent Technical Report titled Tactical Competency Survey, PRETEST Data Base (Drogowski, 1983).

In order to enhance the tactical knowledge of Naval officers, it will be necessary for the Department of the Navy to clearly define its goals and objectives in this area, along with providing Naval officers direction, guidance, time and training. Additionally, it will be necessary to instill in both the individuals and their respective commands a sense of priority for the tasks and functions involved. Unless these priorities are clear and precise, the officers' perception of workload and time distribution may constrain their opportunity to become proficient in tactics.

B. OBJECTIVE

The objective of this study is to conduct empirical research on workload and time distribution of Naval officers in a military organizational environment and the impact in the area of individual tactical development. The question of whether the Navy is giving misleading messages with respect to objectives by prioritizing time distribution and workload

will be discussed, along with officers' perceptions of the Navy's priorities.

The analyses completed in this study will be discussed in depth in Chapter V. A discussion of the nature of the problem of workload and time distribution precedes this discussion.

II. REVIEW OF LITERATURE

> "In our quest for a better environment, we must always remember that the most important part of the quality of life is the quality of work. And the new need for job satisfaction is the key to the quality of work."
> (Richard M. Nixon, Sept. 6, 1971, Labor Day)

This chapter presents an overview of the literature reviewed in preparation for the analysis of questions 152-184 in this study. The intent of this chapter is to set the framework for the analysis and conclusions discussed in Chapter V.

A. WORKLOAD

1. Satisfaction

The concept of workload can be described as the amount of work that an employee or group of employees can perform or is expected to perform within a specified period of time. From this concept many studies over the years have been conducted relating workload to stress, fatigue, productivity, job satisfaction and work motivation. One of the more famous recent series of studies focuses on Frederuck Herzberg's Motivation-Hygiene (Two-Factor) Theory.

Herzberg developed an innovative research method associating incidents on the job with "good feelings" and "bad feelings". From this method he developed the "motivation-hygiene" theory of motivation, which has served as the foundation

for many job enrichment programs and the spring board for a large amount of research, and controversy. He found that job satisfaction and job dissatisfaction may not be opposites but rather two separate dimensions. Dissatisfaction is caused by certain extrinsic factors (hygiene factors) related to job context. Satisfaction is caused by certain intrinsic factors (motivating factors) related to job content.

Extrinsic factors such as pay, supervision, working conditions, etc., cause dissatisfaction when they deteriorate to a level below that which the worker finds acceptable. However, even when the extrinsic factors lie above the acceptable level, they do not generally cause satisfaction. Intrinsic factors like, achievement, recognition, responsibility, etc., cause satisfaction, but their absence does not usually cause dissatisfaction. In certain instances, increases in productivity have been found to correlate with increases in satisfaction but not with decreases in dissatisfaction. Likewise, according to Herzberg, extrinsic improvements will only make work more tolerable, but will not necessarily motivate to greater productivity. Therefore, according to Herzberg, jobs must be made more interesting to the worker and more challenging. In addition, he found that the feeling of satisfaction generated by intrinsic factors seemed to be lasting rather than temporary.

In general, according to Herzberg, workload is an extrinsic factor that will create a negative effect on job

satisfaction and motivation if not maintained within an acceptable level.

2. Work Overload

Of great importance is the arena of work overload. According to Leonard Moss, under conditions of extremely high stress or overload, job performance tends to deteriorate rapidly with only small amounts of additional stress. Stress overload can come from extremes of work pressure alone or from a combination of stressors, such as extraordinary work pressure plus other stressful life events.

Overload has deservedly received much attention as a stressor. It may be quantitative or qualitative work overload. Quantitative means simply having too much to do; qualitative means that the work is simply too difficult. Leon J. Warshaw, M.D., describes quantitative and qualitative work overload as follows:

> Quantitative overload may be simply a matter of long hours without adequate rest periods, as with excessive overtime or moonlighting. The woman worker is frequently subjected to such overload when she has to perform all of her traditional housekeeping and child-care duties in her off hours. Overload can be created by too many phone calls, office visitors, meetings, and other work interruptions or by the imposition of unrealistic deadlines for the completion of difficult tasks.
>
> Qualitative overload is experienced by air-traffic controllers, surgeons, television directors, and others whose work demands continuous concentration and rapid, meaningful decisions. It is also characteristic of individuals with a strong sense of responsibility for the quality of their work that is challenged by the requirement to speed up their activities. These include various kinds of craft workers, accountants and auditors (particularly at tax time), and the staffs of overcrowded hospital emergency rooms and intensive care units.

The pressure of having too much to do or at least feeling that one has too much to do would seem to be a fairly obvious stressor. Numerous studies have been conducted relating overwork and stress to medical problems. In particular, John French and Robert Caplan at the University of Michigan in 1972 found overload to be associated with increases in both cholesterol level and heart rate.

Another investigation on quantitative overload involved a representative national sample of 1.496 workers. It found that overload was significantly related to a number of stress related reactions, such as excessive drinking, low motivation to work, low self-esteem, and absenteeism (Margolis et al., 1974).

There is good evidence that overload invariably leads to breakdown. It may be sudden and immediate as in "battle fatigue" or subtle and gradual, as in an increased incidence of heart attacks and premature deaths among workers in similar working environments.

3. Work Underload

Underload can also cause difficulty. Boredom, lack of stimulation, lack of opportunity to use acquired skills and abilities, and the repetitive performance of seemingly meaningless tasks are examples. It should be noted that the inattentiveness and boredom caused by the stress of underload are also liable to cause accidents and further, while the stressed worker may cause the accident, the victim who suffers

may be a coworker or some other underloaded, innocent bystander.

Additional studies indicate that work performance (and satisfaction) deteriorates rapidly under conditions of extreme work underload. Depression and serious self-esteem problems are consequences of the absence of challenge and work pressure.

Leonard Moss in his book Management Stress believes that "Managers and executives look for a high level of intrinsic gratification in their jobs, gratification based on the use of competence and experience or the application of skills. Work underload provides insufficient challenge, too little opportunity to use their talents, and consequently reduces available job satisfaction."

Work underload raises a variety of career-related anxieties and defensive reactions about one's competence, value to the organization, future career prospects. Those underworked will often consider personality conflicts, office politics, troubled relationships with supervisors as possible reasons work has stopped flowing in their direction. As the anxiety builds and the underload continues, reasons for the slack in workload may be misattributed. For example, "they want me out", or "he has it in for me" or "my boss never delegates authority".

If underworked employees lose confidence, then the tendency might be to become defensive, dependent on the job,

or to hold on for survival. At this point, they may try to control whatever work there is more rigidly than before, to delegate less, to obstruct the actions of others more in order to seek reassurance of competence or respect in the eyes of others. In short, some level of challenge and satisfaction from accomplishment in day-to-day work is necessary for employees occupational mental health.

B. TIME DISTRIBUTION

It is important to have a clear understanding of the relationship between time distribution and the concept of the individual's role in the organization.

The term role is used to designate the composite of societal patterns associated with a particular status position. It includes values and behavior assigned by the society to all persons occupying a specific position. It includes the legitimate expectations of incumbents with respect to the behavior of other people toward them. Everybody occupies several roles concurrently. We are the superiors of some people and the subordinates of others. We are children, parents, marital partners, friends and members of clubs or trade unions.

Organizations can be defined as a system of roles. They are much more than aggregates of men, machines, material, time, and space. Certain activities are ascribed to particular positions in organizations. A complete set of activities for a particular position is it's role. Formal documents such as

position descriptions spell out the activities of a particular position or office, including how it relates to other similar positions in the organization. In many cases roles are not set forth explicitly, and yet they seem to be understood by organizational members.

However, roles are not always clear cut. There are several complications that make it difficult to define particular roles and often lead to role conflict. The concept of multiple roles is one such phenomenon. Individuals play many roles simultaneously. Usually, however, only one role is active at a particular time while others are in relative degrees of latency. Multiple roles relate to multiple positions which an individual holds, often in various institutional settings home, church or work for example. Within each organization of which the individual is a member, he occupies a particular position and performs certain activities associated with that role.

1. Conflict

Conflicts easily arise among our various roles and are often stress-evoking. For instance, demands at work clash with those from a sick parent or child, or when a worker may be divided between different responsibilities associated with his job. Alan A. McLean provides a clear definition of role conflict in his book, Work Stress:

> Role conflict exists when an individual in a particular work role is torn by conflicting job demands or doing things that he or she does not really want to do or does

not think are part of the job. An example of this would be when a person is caught between two groups each of which has differing expectations of the role occupant. Role conflict has been related to low job satisfaction and high job-related tension. French and Caplan (1970) telemetered the heart rates of twenty-two men for a two-hour period while the men were at work in their offices. They found that the individual's heart rate was strongly related to his report of role conflict.

According to H.L. Tosi and S.J. Carroll in the book, Management Contingencies, Structure, and Progress, "Role conflict occurs when a person is subjected to inconsistent demands with respect to his behavior".

This concept has been further examined in the detailed studies of Kahn, Wolfe, Quinn, Snoek and Rosenthal in their book, Organizational Stress: Studies in Role Conflict and Ambiguity, (Kahn, 1964), in which they identify five types of Role Conflict: Intrasender conflict, Intersender conflict, Inter-role conflict, Person-role conflict, and Role overload. The following is a clear description and example of the five types of role conflict provided by Kahn et al (1964):

INTRASENDER CONFLICT occurs when a single supervisor presents a subordinate with an incompatible set of orders or expectations. For example, a division manager orders a purchasing agent to buy materials immediately at a price that requires prior home office authorization, and then warns the agent not to violate the rulebook regulations.

INTERSENDER CONFLICT arises when orders or expectations of a person or group clash with expectations or orders from other persons or groups. This can occur, for example, when a supervisor orders a foreman to engage in tighter supervision, while the work crew makes clear that any attempt to comply with this order will lead to serious trouble in the ranks.

INTER-ROLE CONFLICT occurs when the different roles played by the same person give rise to conflict demands.

In his roles as husband and father, for example, a man may be pressed to be home with his family in the evening and on weekends. But in his role as a loyal worker, the same man may have to put in a considerable amount of overtime to get his work done. This particular example of inter-role conflict is extremely common and often creates great tension both on the job and at home.

PERSON-ROLE CONFLICT occurs when on the job role requirements run counter to the individual's needs and values. An executive ordered to bribe a domestic or foreign official, for example, might find the assignment completely antithetical to his or her moral values. Yet his or her desire for career success might make refusal to carry out the order difficult.

ROLE-OVERLOAD CONFLICT, the individual is confronted with orders and expectations from a number of sources that cannot be completed within the given time and quality limits. Should quality be sacrificed in the interest of time? Should some tasks be carried out and other ignored? If so, which tasks should get priority? Dilemmas like these are a constant part of a manager's job.

It is important to note that role conflicts exist in all organizations and people learn to adapt to some moderate levels. Organization structures which define jobs and accountability are efforts to minimize this condition.

Among the dysfuntional consequences of role conflict are these: (1) intensified internal conflicts for the individual, (2) increased job tensions, (3) reduced job satisfaction, and (4) lessened trust in superiors and the organization.

The majority of the literature reviewed for this study suggests a strong relationship between role conflict and time distribution. That is, the time individuals within an organization devote to role related activities may conflict with the priorities the organization sets for those activities.

This study will seek to determine how work load and time distribution for normal tasks affect the perceptions of the Naval Aviators toward their roles in the Navy and competency in their duties. If the Navy sees peace time activities, such as administrative tasks, as being of a greater priority than war fighting tasks, such as tactical development, and the individual or command does not agree with the ranking of those tasks, then conflicts exist as defined by the literature reviewed. Chapter III, which follows, very briefly summarizes the survey vehicle used during the pretest phase as described in the Introduction. A brief review of the section used for the analyses in this study is also included. In-depth review of the entire survey is possible by referring to a published technical report (Drogowski, 1983, Appendix C).

The concepts and ideas described in this chapter will support and help clarify the analysis and conclusions presented in Chapter V.

III. PREVIOUS METHODOLOGY USED

A. PURPOSE

This chapter will present a brief background of the survey vehicle used for gathering the data used in this study.

B. THE INSTRUMENT

The survey vehicle was designed by LT Francis Drogowski USN of the Naval Postgraduate School, Monterey, California, and CDR Martin Newman USN of the Navy Personnel Research and Development Center, San Diego, California, in December 1982 and January 1983 and titled "Tactical Compentency Survey". The vehicle consisted of a two-page cover letter, two pages of instructions, a booklet of 202 questions, and a comment sheet to provide open-ended feedback. The questionnaire was developed to measure perceptions of Naval officers in operational billets in the areas of Workload, Stress, Communications, Time Distribution, Feedback Process, Peer and Self Evaluation, and Resource Availability. However, it also lends itself to other areas of research. Tactical Competency, Organizational Development, Managerial Processes, Organizational Behavior, and Reward Systems are only a few areas of possible additional research. The questionnaire was broken down into six basic divisions: Background, Training, Workload, Organization, Resources, and Comments. It is within the third part, Workload, that it is possible to extract questions pertaining

to workload and allocation of time as analyzed in the current study. The Tactical Competency Survey asks the respondent to compare four workload-related areas.

Scale ordering of workload-related questions in four specific areas are completed by the individual. The workload-related areas--Workload and Time Allocation, Actual Time Dedicated to each activity, Time Perceived as should be dedicated to each activity, and Perception of Workload vs. Tactical competency--are compared by the respondent. The respondent's perception as to the priorities of certain activities was solicited. From this scaling, perceptions of time distribution and workload are obtainable through analysis.

Questions numbered 152 through 184 are specifically directed toward workload in the Tactical Compentency Survey and will be analyzed within this study (Drogowski, 1983: pp. 72-77). Although it is possible to extend questions other than these for analysis in the area of time distribution and workload, no others were extracted for this purpose at this time. In order to complete analysis on the selected questions, it was found to be time-saving to extract the entire Data Bank, together with the program written for analysis, as described in the Technical Report of the Tactical Competency Survey. The data remained unchanged in form and content during the analysis within this study. The computer program was modified to analyze only the responses to the 32 particular questions,

plus questions 1 through 11, which deal with demographics. Chapter IV will describe the modification of the program for the current analysis.

IV. PROGRAM FOR ANALYSIS

This chapter describes the program used to analyze only those responses to questions 1 through 11 and 152 through 184 of the data generated from the pretest of the survey completed by Drogowski (1983) in the area of Individual Tactical Development. The program was written to interface with the Statistical Package for the Social Sciences (SPSS).

A. PURPOSE OF THE PROGRAM

The computer program in Appendix "A" was developed with the intent of analyzing only responses to questions 1 through 11, dealing with demographics, as well as 152 through 184, which deal with Time Distribution and Workload. The program was designed to extract and analyze the forementioned questions from the original program, described in the Technical Report, as Appendix "D".

B. PROGRAM DESCRIPTION

The program (Appendix "A"), created to extract designated information from the original program, consists of two functional parts, which are executed in the following sequence:

1) Data Definition Cards

    a). Get File
    b). Comment
    c). Recode
    d). Print Formats
    e). Missing Values

2) Task-Definition Cards

a). Frequencies
b). Statistics
c). Options
d). Crosstabs

The program begins with the Get File card. This card allows the user to access an existing SPSS file. The comment card contains explanatory comments that do not affect the analyses. Recode instructions are used to convert the alphanumeric value labels used in certain questions into positive single-digit integers. Additional RECODE instructions were given to recode the assigned missing value label previously in alphanumeric form to a numeric value. Later in the program, the newly assigned missing values are deleted from the computations. A second RECODE card is used to group the various present commands of the respondents into three general categories: Staff, Ship, or Air Squadron.

The PRINT FORMATS card specifies the printing format of the variables and is required only when there are variables in the file that contain nonnumeric characters. The MISSING VALUES card enables the user to designate up to three values for each variable in the file to be treated as missing. As stated earlier, missing values were programmed to be deleted.

The SPSS system is instructed in the execution of the statistical computations by means of a set of task-definition cards. The FREQUENCIES card computes and presents one way frequency distribution tables, i.e., marginals. FREQUENCIES

also enables the user to calculate, along with the distribution tables, any or all of a variety of descriptive statistics. The "general mode" produces frequency tables for all types of variables. The STATISTICS card enables the user to select among a number of available statistics to accompany the calculations and to be reported on the output.

The OPTIONS card enables the user to choose among available subprogram options so that the calculations are performed on the data in the manner desired. OPTION 8 was used with this program. OPTION 8 causes a histogram to be printed for each variable listed on the FREQUENCIES card. The final task-definition card used in this program was the CROSSTABS card. The CROSSTABS card computes and displays crosstabulation tables for discrete variables, either numeric or alphanumeric. This program crosstabulated the respondent's answers with respect to rank and present command.

After the program was found to be error-free, the analyses described were performed to determine the impact of workload and time distribution in the area of individual tactical development. Results and methodology of the analyses are discussed in the following chapter.

V. ANALYSIS AND CONCLUSIONS

This chapter describes the results of the statistical analyses performed. These analyses specifically deal with questions 152 through 184 in the survey questionnaire. However, other specific questions may be examined in order to reinforce or justify the conclusions. The intent of the analysis was to investigate the effect of workload and time distribution on individual tactical development.

A. BASIC ANALYSIS

The selected questions were first analyzed by the use of the original program contained in the Technical Report (Drogowski, 1983) to determine if inappropriate variables (variables which do not apply to workload and time distribution) existed within the data set. None was found. Further analysis was conducted by the use of the program discussed in Chapter Four and presented in Appendix "A" to determine the frequency distribution of the responses to each question. The initial examination of the frequency distributions indicated that each question analyzed was answered by nearly all of the 286 respondents that had met the acceptance criteria for inclusion in the data set. The total number of missing cases for each question was not large enough to have any notable effect on the frequency distribution for the question.

The frequency distribution table for each question is displayed in Appendix "B". Included are Absolute Frequency Count, Relative Frequency Percent, Adjusted Frequency Percent, and Cumulative Frequency Percent.

Histograms for each question are also provided in Appendix "B". The histograms present a graphic display of the relative frequencies of the variables analyzed. Descriptive statistics were computed and are included beneath each histogram.

Further analysis of each question was performed by the use of the "CROSSTABS" card, as discussed in Chapter IV. Crosstabulation tables were computed breaking down responses to each question by respondents' rank and present command.

The initial crosstabulation failed to show any apparent relationship between rank and command. Then the program in Appendix "A" was modified to compute Chi-square. Chi-square is a test of statistical significance. It helps to determine whether a systematic relationship exists between two variables. This is done by computing the cell frequencies which would be expected if no relationship is present between the variables given the existing row and column totals (marginals). The expected cell frequencies are then compared to the actual values found. No significant findings occurred. A more in-depth discussion will be presented later in this chapter.

B. DETERMINATION OF MEAN, MODE AND MEDIAN VALUES FOR EACH QUESTION ANALYZED

The mean, mode, and median values of the responses for each question analyzed were computed by the use of the STATISTICS line of the program in Appendix "A". The mean is the most common measure of the central tendency for variables measured at the interval level. Often referred to as the "average", it is merely the sum of the individual values for each case divided by the number of cases. The mode is the value of the variable which occurs most often. The median is the numerical value of the middle case lying exactly on the 50th percentile, once all cases have been rank ordered from highest to lowest.

In this study, mean, mode, and median values were used to analyze workloads, time distribution, role conflict, and comparisons between actual time dedicated to an activity and the time that individuals perceived should be dedicated to the activity. Table I shows that comparison.

C. ANALYSES OF WORKLOAD

The data used to analyze workload clearly indicates work overload to be a predominant condition existing among the sample of 286 Naval Aviators.

The questions which support this conclusion show the respondents' normal work week at sea to be 7 days, with a mean workload of nearly 13 hours per day, mode 14 hours,

while in port to be nearly 6 days, with a mean workload of 10 hours per day. The individuals surveyed perceived the extent to which they were being overworked to be between moderate to mid-great.

These findings give rise to the possibility of the existence of particular workload related problems, as discussed in Chapter II. Work overload may cause stress, fatigue, job dissatisfaction, deteriorating work performance, or eventual breakdown.

Further, it must be noted that the greatest work overload occurred while at sea in an operational status. This environment has the potential of fostering explosively dangerous situations. For example, a fatigued air traffic controller directing air traffic at night on board an aircraft carrier may lose his concentration just long enough to misdirect an approaching aircraft. The results could be devastating.

Unfortunately, the Tactical Compentency Survey did not contain questions directly addressed to the topic of job satisfaction. However, the respondents' perceived that their overall productivity contributed a "great extent" to the achievement of command goals. According to Herzberg's Motivation-Hygiene Theory, this attitude would be associated with "good feelings" or intrinsic factors related to job content. Thus, at least some degree of job satisfaction may be inferred.

D. ANALYSES OF TIME DISTRIBUTION

The mean values presented in Table I are based on the actual time the respondents dedicate to an activity and the respondents' perception of the amount of time that they should dedicate to the activity. The scale values used to determine the means, range from 1 to 10, of which 1 represents the greatest amount of time and 10 the least amount of time. Based on the mean values of the actual time dedicated to a particular activity, the respondents' time is distributed as follows:

ACTIVITY	MEAN
1. Primary Billet	1.6
2. Admin. Requirements	3.2
3. Collateral Duties	5.0
4. Tactical Training	5.2
5. Personnel Management	5.3
6. Non Tactical Training	6.3
7. Material Management	7.0
8. Personal Professional Qualifications	7.1
9. Watchstanding	7.2
10. Program Management	7.3

Additionally, the amount of time in hours per day that an individual dedicates to the activities ranked number one and number two was determined. The mean was 6 hours and 3 hours, respectfully.

When asked if this time distribution satisfied Command Mission requirements, the respondents' answer was "to a moderate extent". Respondents also felt that the availability of sufficient time to develop individual tactical competency

was less than "moderate". Perceptions such as these set the framework for role conflict within the individual.

1. Role Conflict

The scale values computed for this study and shown as means in Table I are obviously unequal. This inequality in means clearly illustrates the existence of role conflict, as described in Chapter II. According to Kahn, Wolfe, Quinn, Snoek and Rosenthal in their book, Organizational Stress: Studies in Role Conflict and Ambiguity (Kahn, 1964), this type of role conflict can be classified as either INTER-ROLE CONFLICT, different roles played by the same person giving rise to conflicting demands, PERSON-ROLE CONFLICT, job role requirements run counter to the individual's needs and values, or ROLE-OVERLOAD CONFLICT, that is, the individual is confronted with orders and expectations from a number of sources that cannot be completed within the given time or quality limits.

Had the computed mean values been equal to each other, then it could have been said that role conflict does not exist; however, this is not the case. For example, the actual mean values for admin. requirements and tactics were 3.2 and 5.2, while the perceived mean values were 5.4 and 3.1 respectfully (See Table I). Another approach can be taken for the determination of the existence of role conflict. Additional analysis of the generated mean values was completed. By modifying the program in Appendix "A" to perform the subprogram PEARSON CORR,

the correlation between the actual amount of time an individual devotes to an activity and the amount of time the individual feels should be devoted to that activity was produced.

Subprogram PEARSON CORR computes Pearson product-moment correlations for pairs of variables. These are zero-order correlations because no controls for influence of the other variables are made. The Pearson correlation is used to measure the strength of relationship between two interval-level variables. The statistic produced by this subprogram is known as Pearson's r. Besides it's role as an indicator of the goodness of fit of the linear regression, it is a measure of association indicating the strength of the linear relationship between two variables. If the r is close to zero, we can assume there is little or no linear relationship between the two variables. If the value of r approaches +1.0 or -1.0, we can assume there is a strong linear relationship. Table II shows the Pearson's r generated for this study.

For the purpose of this study, if the r is low (.0-.3), the results would indicate that the respondents feel that their time in not being properly devoted to the activity. Conversely, a high r (.7-1.0), would indicate the respondents feel that appropriate amount of time is being devoted to the activity. The low r values for the sample of 286 Naval Aviators clearly supports the existence of role conflict between the Commands and their personnel in the area of role-related activities.

The strongest sources of role conflict appear to exist in the area of administrative duties and the least in watchstanding.

The Pearson's r for Tactical Training was .47. This result indicates that a moderate amount of role conflict exists between the Command and Individual within the Air Warfare Communities on the issue of tactical training. This conclusion can be supported by the mean values of the perception of individuals that their command encourages individual development of tactical concepts and gives priority to the development of tactical concepts. The mean results indicate encouragement to a "moderate" extent and "less than moderate" extent, respectfully.

It must be stated that this data does not allow for the conclusion to be drawn that role conflict exists throughout the entire Navy. This is because the survey has been used as a pretest vehicle and does not solicit responses from individuals outside of the aviation community. It must also be stated that this study makes two very important assumptions as far as interpretation of the results is concerned. First, it is assumed that all individuals with the designators 1310, 1315, 1320, and 1325 perceive task priority the same. The second assumption is that all the various aviation communities perceived the defined tasks the same. Data from all these communities were combined in this study, as were the data from all designator groups. As mentioned earlier, in the

crosstabulation of command and rank with computation of Chi-square, no significant findings occurred.

A summary statement of the results within the area of role conflict is that the individuals comprising the sample indicate that role conflict does arise between command and individuals. Sampled individuals perceive that the Navy and commands do not place a great enough priority on Individual Tactical Development.

It should be noted that the existence of role conflict leads to stress and frustration. It would appear that there are some frustrated air warfare officers in operational billets.

E. CONCLUSION

Work overload and improper time distribution may lead to difficulty in performing well in the roles assigned to the Air Warfare Officers surveyed. Overload can cause stress, fatigue, and frustration. Improper time distribution leads to role conflict, which can lead to confusion. Both workload and time distribution have a dramatic effect on the development of individual tactical competency. In order for the individual to develop adequate skills, conflict must be reduced to an acceptable level, workload must have reasonable limits, and a proper amount of time must be dedicated to the process.

TABLE I

MEAN, MODE AND MEDIAN VALUES

	ACTUAL			PERCEIVED		
	MEAN	MODE	MEDIAN	MEAN	MODE	MEDIAN
Primary Billet	1.6	1.0	1.2	1.6	1.0	1.2
Admin. Requirements	3.2	2.0	2.8	5.4	5.0	5.3
Collateral Duties	5.0	2.0	4.4	5.7	2.0	2.5
Tactical Training	5.2	5.0	5.0	3.1	2.0	2.5
Personnel Management	5.3	4.0	4.8	5.9	6.0	5.9
Non Tactical Training	6.3	5.0	6.3	5.5	4.0	5.3
Material Management	7.0	9.0	7.2	7.0	8.0	7.0
Personal Professional Quals.	7.1	7.0	7.4	5.5	3.0	5.4
Watchstanding	7.1	10.0	7.8	7.6	10.0	8.5
Program Management	7.3	10.0	7.5	7.9	9.0	8.3

TABLE II

Pearson's r

Activity	r
Primary Billet	.56
Admin. Requirements	.21
Collateral Duties	.56
Tactical Training	.47
Personnel Management	.47
Non Tactical Training	.36
Material Management	.68
Personal Professional Qualifications	.37
Watchstanding	.70
Program Management	.37

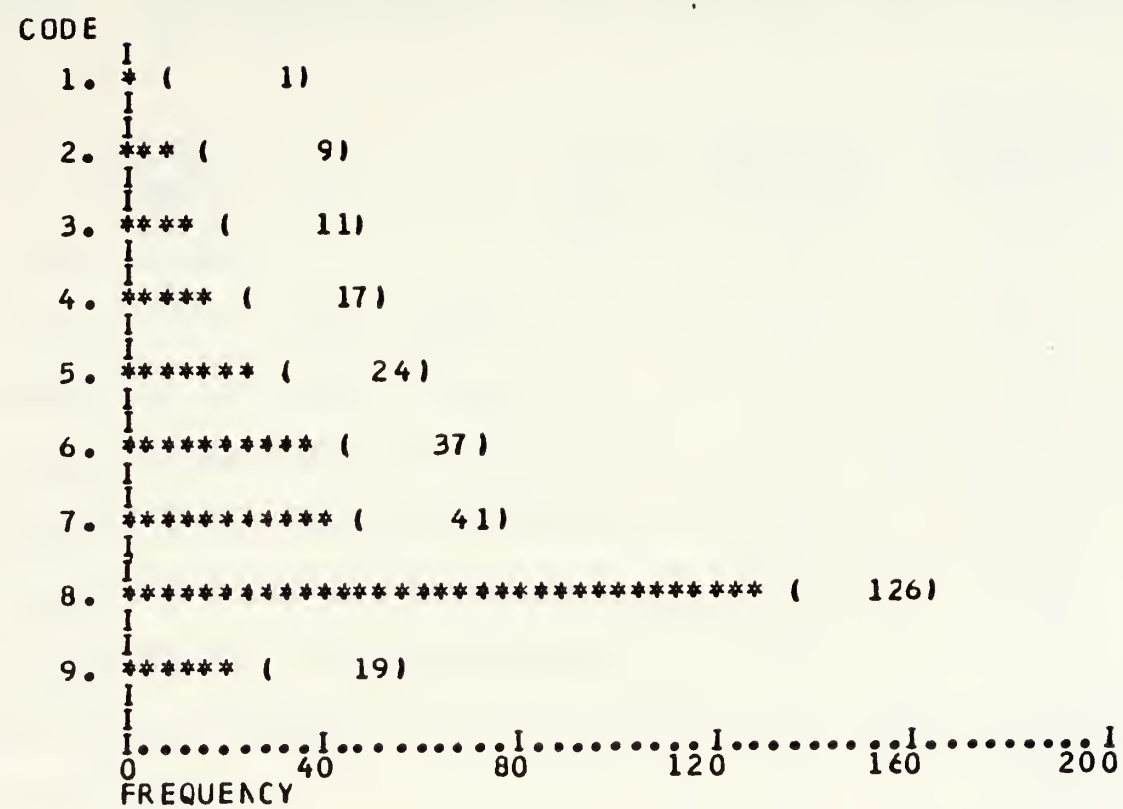
```
//JAMESC JOB (2988,5555),'MCGRANAHAN',CLASS=A
//*MAIN ORG=NPGVM1.2988P
//   EXEC SPSS
//FTC3F001 DD DISP=SHR,DSN=MSS.S2988.SPSSFILE
//SYSIN DD *
GET FILE
COMMENT          SPSS CONTROL LANGUAGE GOES AFTER THIS LINE
RECODE           RICCFTT HPDASWL TO DPWWLIP APROTA TPCIHNO TO IPNGPDTC
                 ('A'=1) ('B'=2) ('C'=3) ('D'=4) ('E'=5) ('F'=6)
                 ('G'=7) ('H'=8) ('I'=9) ('J'=10) ('K'=11) ('L'=12)
                 ('M'=13) ('N'=14) ('O'=15) ('P'=16) (ELSE=99)
RECODE           CCMM ('A' 'B' 'C' 'D' 'E' 'F' 'G' 'H' 'I' 'J' 'K' 'L'
                 = 'STAF') ('M' 'N' 'O' 'P' 'Q' 'R' 'S' 'T' = 'SHIP')
                 ('U' 'V' 'W' 'X' 'Y' 'Z' '0' '1' '2' = 'AIRS')
                 (ELSE = '99')
PRINT FORMATS    RICCFTT HPDASWL TO DPWWLIP APROTA TPCIHNO TO IPNGPDTC (0)
MISSING VALUES   RICCFTT HPDASWL TO DPWWLIP APROTA TPCIHNO TO IPNGPDTC
                 (99)
MISSING VALUES   CCMM('99')
FREQUENCIES      GENERAL = RICCFTT,HPDASWL TO IPNGPDTC
STATISTICS       ALL
OPTIONS          8
CROSSTABS        TABLES= GRADE BY RIOCFTT HPDASWL TO IPNGPDTC
CROSSTABS        TABLES= CCMM BY RIOCFTT HPDASWL TO IPNGPDTC
FINISH
/*
//
```

HPDASWL Individuals' Normal Work Load...Hours Per Day...At Sea... Operational

Category Label	Code	Absolute Frequency	Relative Frequency Percent	Adjusted Frequency Percent	Cumulative Frequency Percent
Less Than 8 Hours	A	1	0.3	0.4	0.4
> or Equal to 8 < Than 9 Hours	B	9	3.1	3.2	3.5
> or Equal to 9 < Than 10 Hours	C	11	3.8	3.9	7.4
> or Equal to 10 < Than 11 Hours	D	17	5.9	6.0	13.3
> or Equal to 11 < Than 12 Hours	E	24	8.4	8.4	21.8
> or Equal to 12 < Than 13 Hours	F	37	12.9	13.0	34.7
> or Equal to 13 < Than 14 Hours	G	41	14.3	14.4	49.1
Greater Than 14 Hours	H	126	44.1	44.2	93.3
Not Applicable	I	19	6.6	6.7	100.0
	&	1	0.3	Missing	100.0
	Total	286	100.0	100.0	

Valid Cases 285 Missing Cases 1

HPDASWL INCIVICLALS' NORMAL WORK LOAD...
HOURS PER DAY...AT SEA...OPERATIONAL



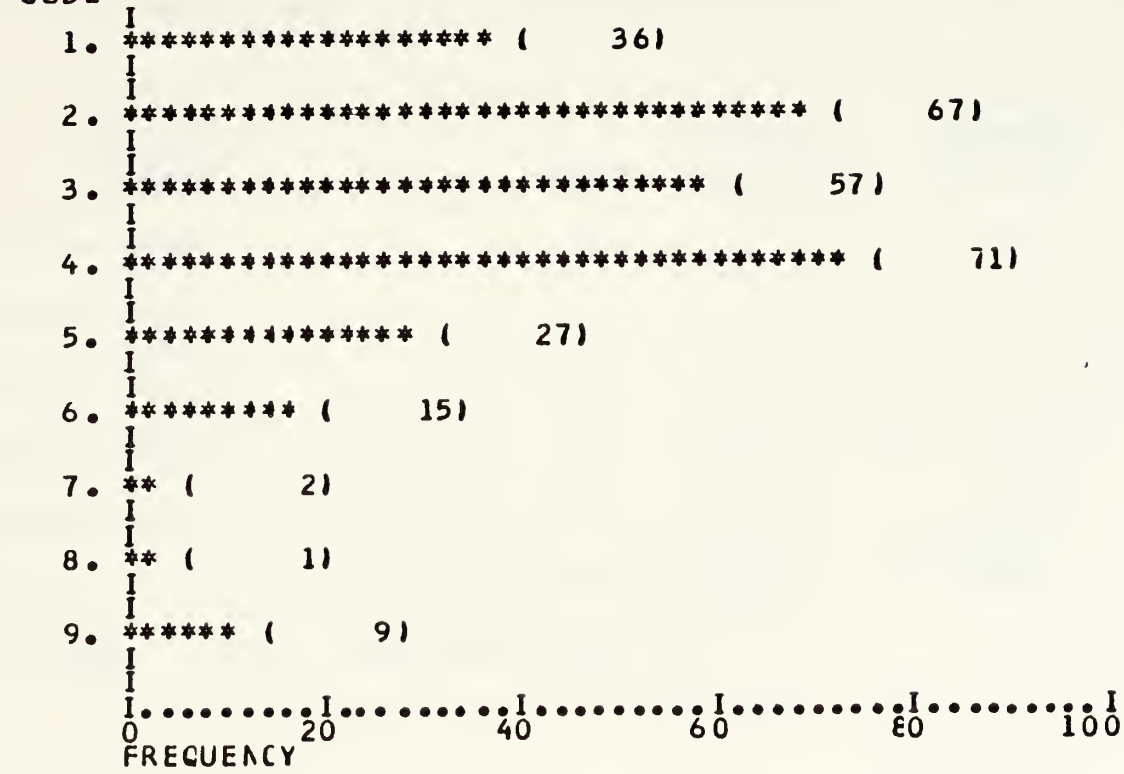
MEAN	6.765	STD ERR	0.106	MEDIAN	7.520
MODE	8.000	STD DEV	1.789	VARIANCE	3.202
KURTOSIS	0.463	SKEWNESS	-1.120	RANGE	8.000
MINIMUM	1.000	MAXIMUM	9.000		
VALID CASES	265	MISSING CASES	1		

HPDIPWL Individuals' Normal Work Load...Hours Per Day...In Port... Non Operational

Category Label	Code	Absolute Frequency	Relative Frequency Percent	Adjusted Frequency Percent	Cumulative Frequency Percent
Less Than 8 Hours	A	36	12.6	12.6	12.6
> or Equal to 8 < Than 9 Hours	B	67	23.4	23.5	36.1
> or Equal to 9 < Than 10 Hours	C	57	19.9	20.0	56.1
> or Equal to 10 < Than 11 Hours	D	71	24.8	24.9	81.1
> or Equal to 11 < Than 12 Hours	E	27	9.4	9.5	90.5
> or Equal to 12 < Than 13 Hours	F	15	5.2	5.3	95.8
> or Equal to 13 < Than 14 Hours	G	2	0.7	0.7	96.5
Greater Than 14 Hours	H	1	0.3	0.4	96.8
Not Applicable	I	9	3.1	3.2	100.0
	&	1	0.3	Missing	100.0
	Total	286	100.0	100.0	

Valid Cases 285 Missing Cases 1

HPDIPWL INDIVIDUALS' NORMAL WORK LOAD...
HOURS PER DAY...IN PORT...NON OPERATIONAL



MEAN	3.344	STD ERR	0.104	MEDIAN	3.193
MODE	4.000	STD DEV	1.753	VARIANCE	3.071
KURTOSIS	1.666	SKEWNESS	1.069	RANGE	8.000
MINIMUM	1.000	MAXIMUM	9.000		

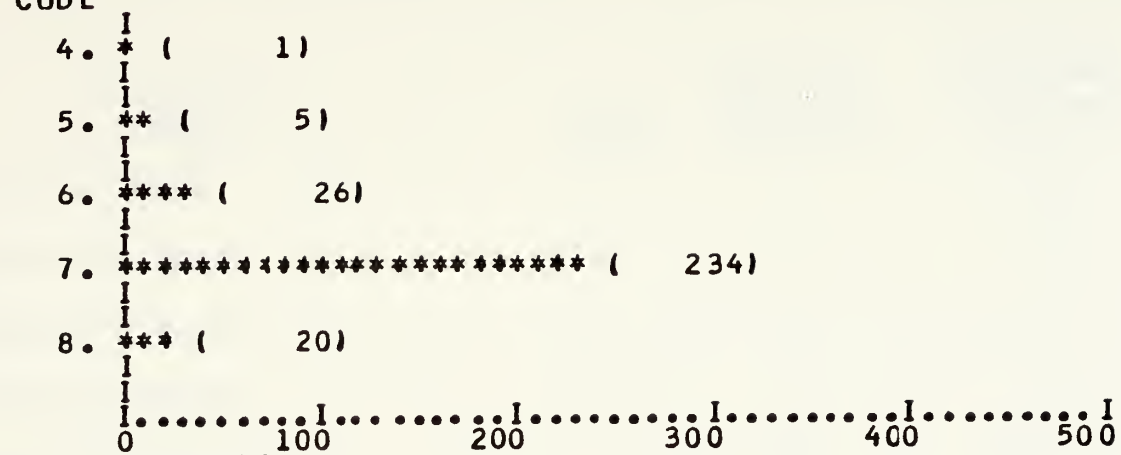
VALID CASES 265 MISSING CASES 1

DPWWLAT Individuals' Normal Work Week...Days Per Week...At Sea... Operational

Category Label	Code	Absolute Frequency	Relative Frequency Percent	Adjusted Frequency Percent	Cumulative Frequency Percent
4 Days Per Week	D	1	0.3	0.3	0.3
5 Days Per Week	E	5	1.7	1.7	2.1
6 Days Per Week	F	26	9.1	9.1	11.2
7 Days Per Week	G	234	81.8	81.8	93.0
Not Applicable	H	20	7.0	7.0	100.0
	Total	286	100.0	100.0	

Valid Cases 286 Missing Cases 0

DPWWLAT INDIVIDUALS' NORMAL WORK WEEK...
DAYS PER WEEK...AT SEA...OPERATIONAL



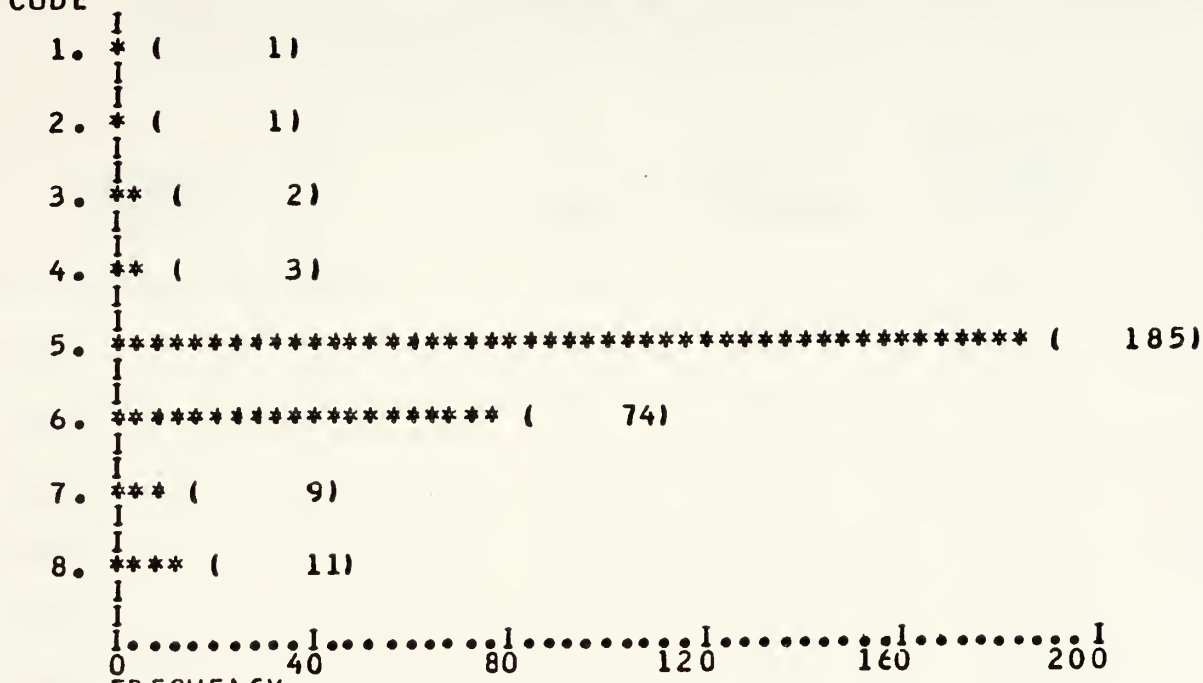
MEAN	6.934	STD ERR	0.030	MEDIAN	6.974
MODE	7.000	STD DEV	0.509	VARIANCE	0.259
KURTOSIS	7.116	SKEWNESS	-1.563	RANGE	4.000
MINIMUM	4.000	MAXIMUM	8.000		
VALID CASES	286	MISSING CASES	0		

DPWWLIP Individuals' Normal Work Week...Days Per Week...In Port... Non Operational

Category Label	Code	Absolute Frequency	Relative Frequency Percent	Adjusted Frequency Percent	Cumulative Frequency Percent
1 Day Per Week	A	1	0.3	0.3	0.3
2 Days Per Week	B	1	0.3	0.3	0.7
3 Days Per Week	C	2	0.7	0.7	1.4
4 Days Per Week	D	3	1.0	1.0	2.4
5 Days Per Week	E	185	64.7	64.7	67.1
6 Days Per Week	F	74	25.9	25.9	93.0
7 Days Per Week	G	9	3.1	3.1	96.2
Not Applicable	H	11	3.8	3.8	100.0
	Total	286	100.0	100.0	

Valid Cases 286 Missing Cases 0

DPWWLIP INDIVIDUALS' NORMAL WORK WEEK...
DAYS PER WEEK...IN PORT...NON OPERATIONAL



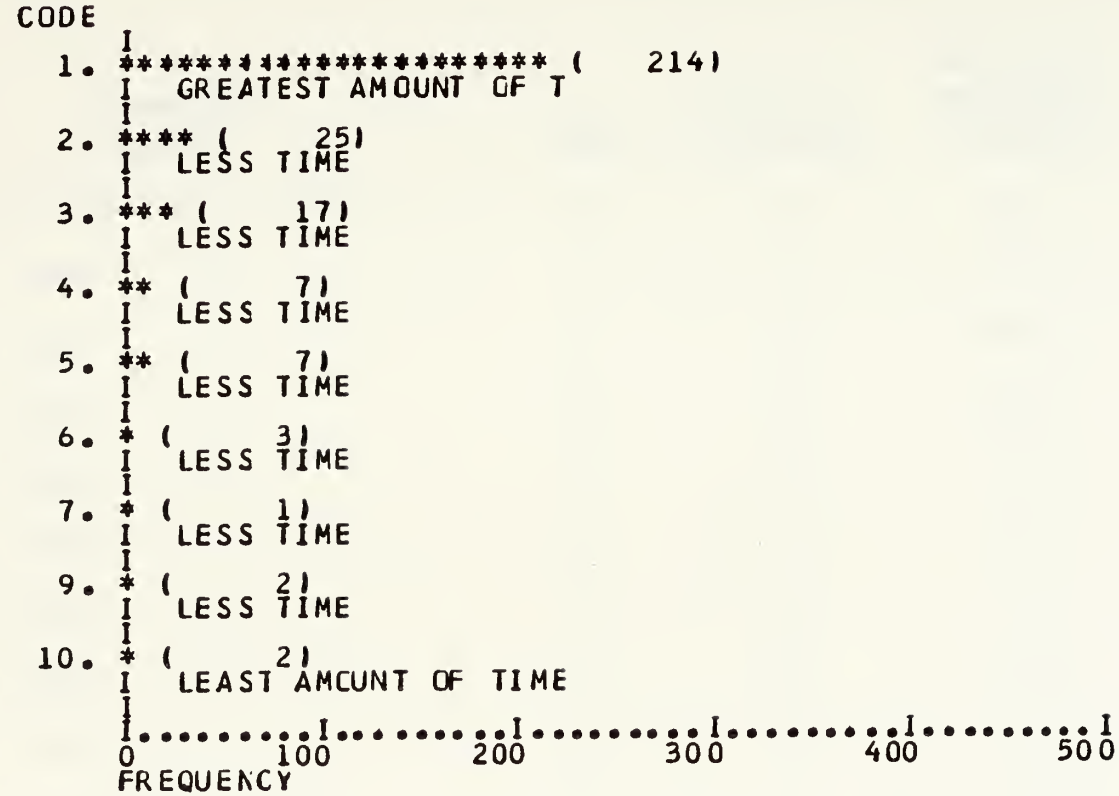
MEAN	5.388	STD ERR	0.050	MEDIAN	5.235
MODE	5.000	STD DEV	0.842	VARIANCE	0.708
KURTOSIS	5.292	SKEWNESS	0.481	RANGE	7.000
MINIMUM	1.000	MAXIMUM	8.000		
VALID CASES	266	MISSING CASES	0		

ROTAPBP Individuals' Rank Ordering of the Job Related Activity... Primary Billet...In Terms of the Amount of Time They Presently Dedicate to that Activity

Category Label	Code	Absolute Frequency	Relative Frequency Percent	Adjusted Frequency Percent	Cumulative Frequency Percent
Greatest Amount of Time	1.	214	74.8	77.0	77.0
Less Time	2.	25	8.7	9.0	86.0
Less Time	3.	17	5.9	6.1	92.1
Less Time	4.	7	2.4	2.5	94.6
Less Time	5.	7	2.4	2.5	97.1
Less Time	6.	3	1.0	1.1	98.2
Less Time	7.	1	0.3	0.4	98.6
Less Time	9.	2	0.7	0.7	99.3
Least Amount of Time	10.	2	0.7	0.7	100.0
	0.	8	2.8	Missing	100.0
	Total	286	100.0	100.0	

Valid Cases 278 Missing Cases 8

ROTAPBP INDIVIDUALS' RANK ORDERING OF THE JOB RELATED ACTIVITY...
PRIMARY BILLET...INTERMS OF THE AMOUNT OF TIME THEY
PRESENTLY DEDICATE TO THAT ACTIVITY



MEAN	1.586	STD ERR	0.086	MEDIAN	1.150
MODE	1.000	STD DEV	1.439	VARIANCE	2.070
KURTOSIS	13.619	SKEWNESS	3.426	RANGE	9.000
MINIMUM	1.000	MAXIMUM	10.000		

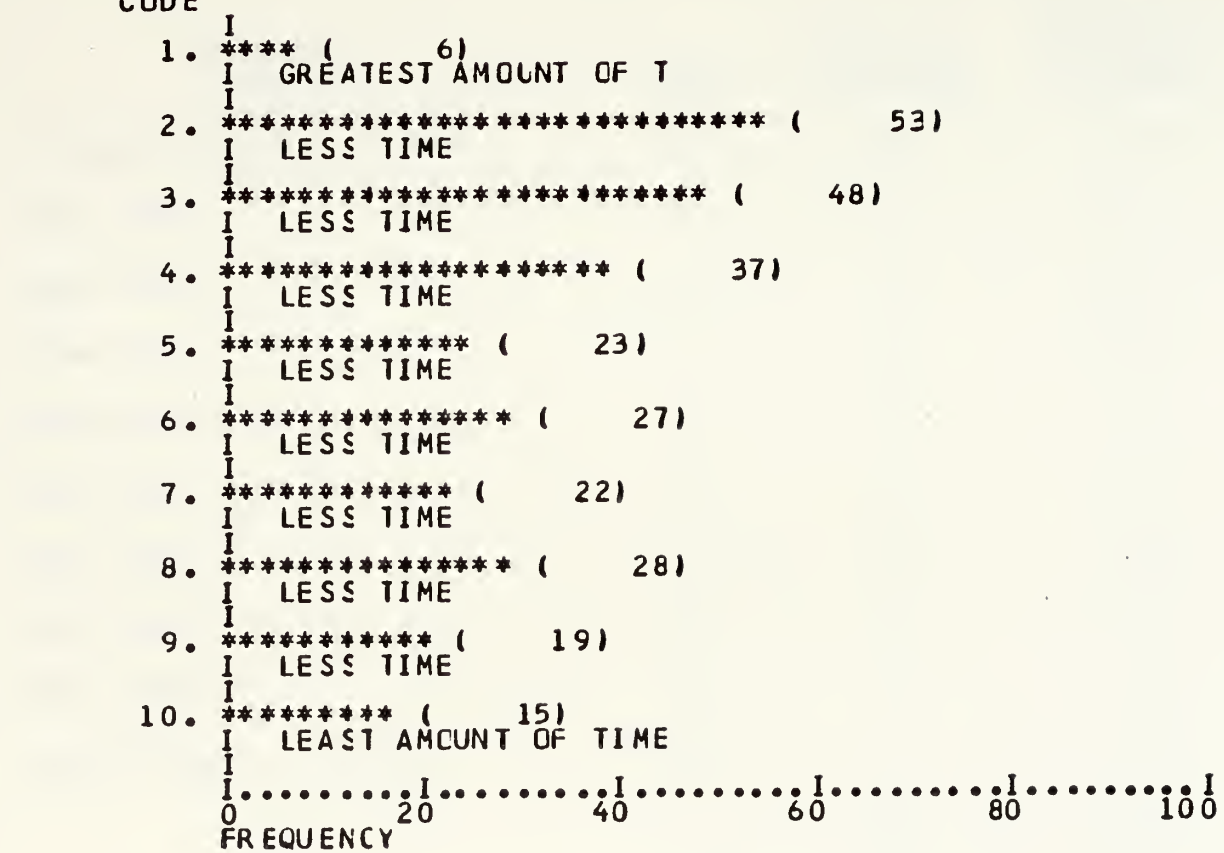
VALID CASES 278 MISSING CASES 8

ROTACDP Individuals' Rank Ordering of the Job Related Activity... Collateral Duties...In Terms of the Amount of Time They Presently Dedicate to that Activity

Category Label	Code	Absolute Frequency	Relative Frequency Percent	Adjusted Frequency Percent	Cumulative Frequency Percent
Greatest Amount of Time	1.	6	2.1	2.2	2.2
Less Time	2.	53	18.5	19.1	21.2
Less Time	3.	48	16.8	17.3	38.5
Less Time	4.	37	12.9	13.3	51.8
Less Time	5.	23	8.0	8.3	60.1
Less Time	6.	27	9.4	9.7	69.8
Less Time	7.	22	7.7	7.9	77.7
Less Time	8.	28	9.8	10.1	87.8
Less Time	9.	19	6.6	6.8	94.6
Least Amount of Time	10.	15	5.2	5.4	100.0
	0.	8	2.8	Missing	100.0
	Total	286	100.0	100.0	

Valid Cases 278 Missing Cases 8

ROTACDP INDIVICLALS' RANK CRDERING OF THE JCB RELATED ACTIVITY... COLLATERAL DUTIES...IN TERMS OF THE AMOUNT CF TIME THEY PRESENTLY DEDICATE TO THAT ACTIVITY



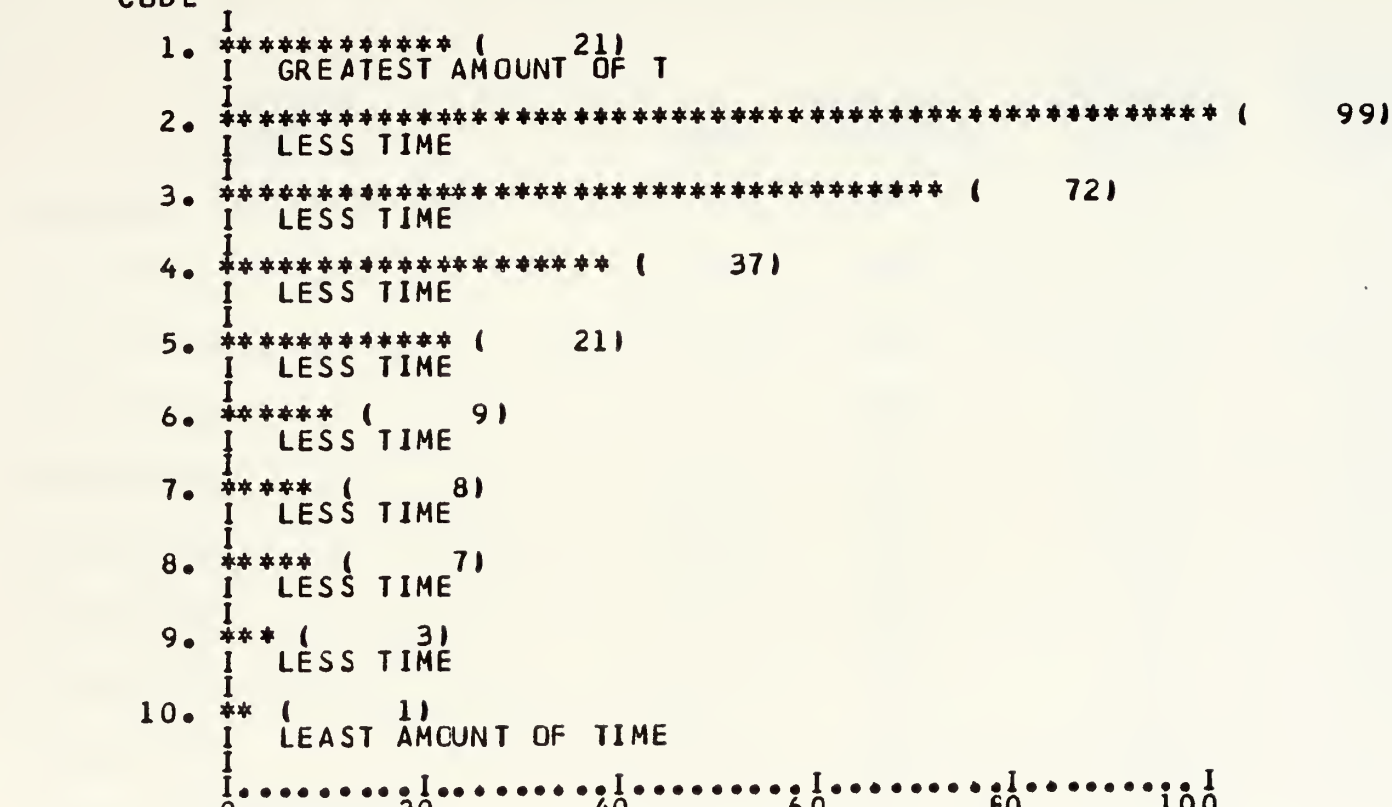
MEAN	4.564	STD ERR	0.155	MEDIAN	4.365
MODE	2.000	STD DEV	2.583	VARIANCE	6.670
KURTOSIS	-1.060	SKEWNESS	0.425	RANGE	9.000
MINIMUM	1.000	MAXIMUM	10.000		
VALID CASES	278	MISSING CASES	8		

ROTAARP Individuals' Rank Ordering of the Job Related Activity... Admin Requirements...In Terms of the Amount of Time They Presently Dedicate to that Activity

Category Label	Code	Absolute Frequency	Relative Frequency Percent	Adjusted Frequency Percent	Cumulative Frequency Percent
Greatest Amount of Time	1.	21	7.3	7.6	7.6
Less Time	2.	99	34.6	35.6	43.2
Less Time	3.	72	25.2	25.9	69.1
Less Time	4.	37	12.9	13.3	82.4
Less Time	5.	21	7.3	7.6	89.9
Less Time	6.	9	3.1	3.2	93.2
Less Time	7.	8	2.8	2.9	96.0
Less Time	8.	7	2.4	2.5	98.6
Less Time	9.	3	1.0	1.1	99.6
Least Amount of Time	10.	1	0.3	0.4	100.0
	0.	8	2.8	Missing	100.0
	Total	286	100.0	100.0	

Valid Cases 278 Missing Cases 8

ROTAARP INDIVICLALS' RANK ORDERING OF THE JOB RELATED ACTIVITY... ADMIN REQUIRMENTS...IN TERMS OF THE AMOUNT CF TIME THEY PRESENTLY DEDICATE TO THAT ACTIVITY



MEAN	3.205	STD ERR	0.104	MEDIAN	2.764
MODE	2.000	STD DEV	1.734	VARIANCE	3.008
KURTOSIS	2.006	SKEWNESS	1.424	RANGE	9.000
MINIMUM	1.000	MAXIMUM	10.000		

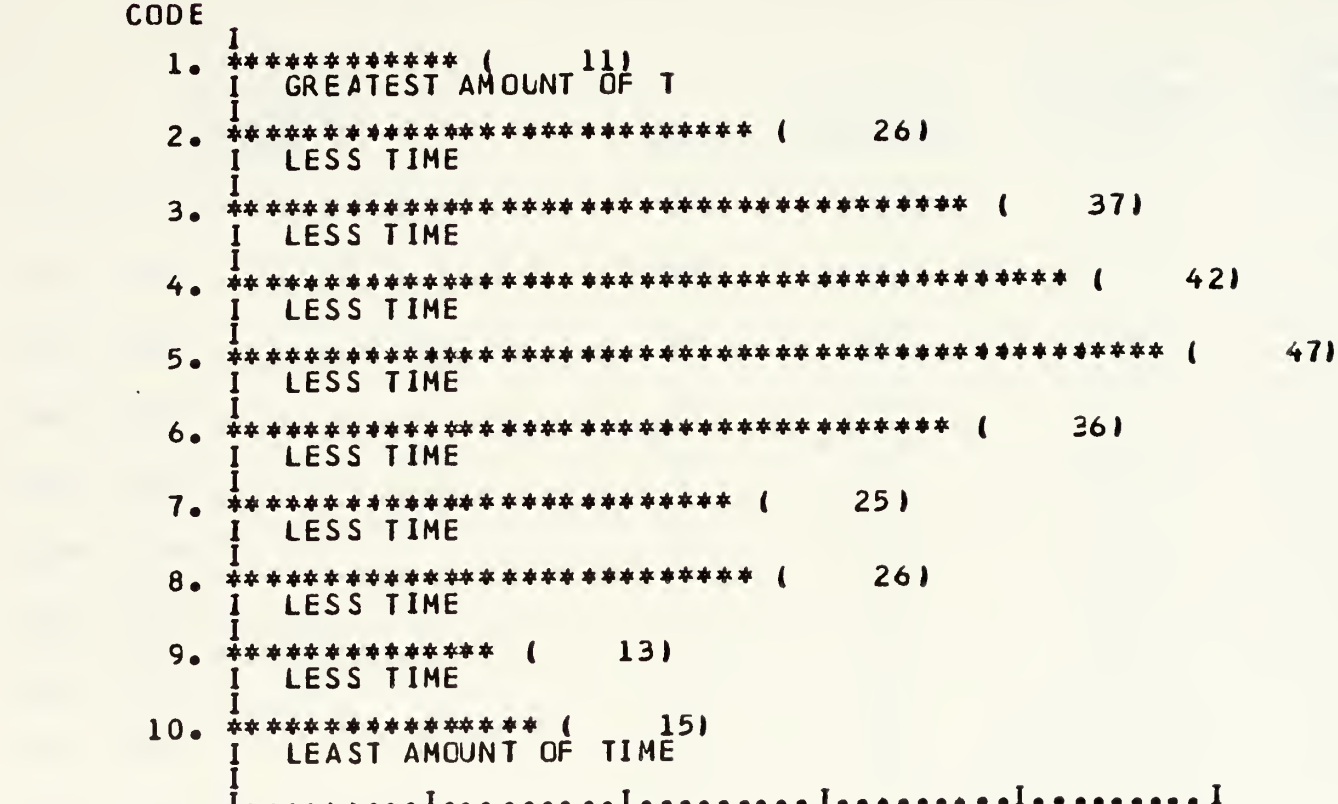
VALID CASES 278 MISSING CASES 8

ROTATTP Individuals' Rank Ordering of the Job Related Activity... Tactical Training...In Terms of the Amount of Time They Presently Dedicate to that Activity

Category Label	Code	Absolute Frequency	Relative Frequency Percent	Adjusted Frequency Percent	Cumulative Frequency Percent
Greatest Amount of Time	1.	11	3.8	4.0	4.0
Less Time	2.	26	9.1	9.4	13.3
Less Time	3.	37	12.9	13.3	26.6
Less Time	4.	42	14.7	15.1	41.7
Less Time	5.	47	16.4	16.9	58.6
Less Time	6.	36	12.6	12.9	71.6
Less Time	7.	25	8.7	9.0	80.6
Less Time	8.	26	9.1	9.4	89.9
Less Time	9.	13	4.5	4.7	94.6
Least Amount of Time	10.	15	5.2	5.4	100.0
	0.	8	2.8	Missing	100.0
	Total	286	100.0	100.0	

Valid CAses 278 Missing Cases 8

ROTATTP INDIVIDUALS' RANK ORDERING OF THE JOB RELATED ACTIVITY... TACTACAL TRAINING...IN TERMS OF THE AMOUNT OF TIME THEY PRESENTLY DEDICATE TO THAT ACTIVITY



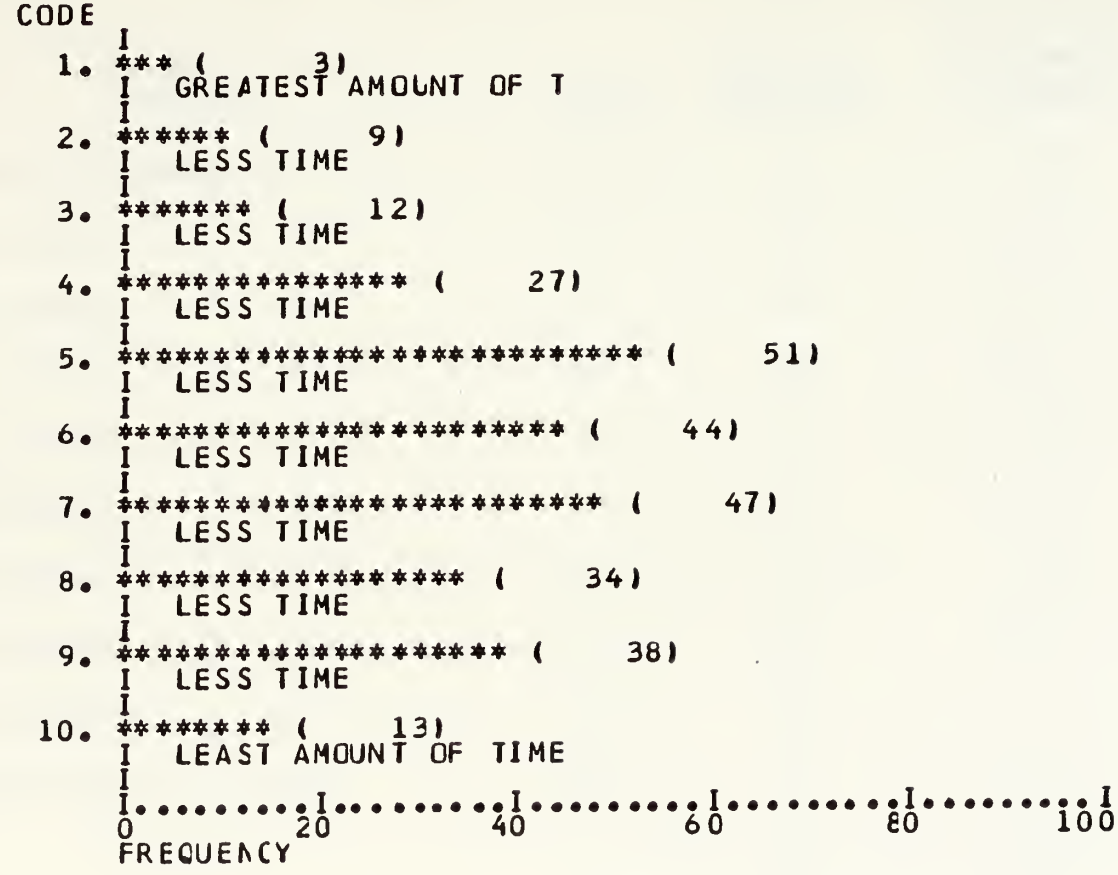
MEAN	5.191	STD ERR	0.142	MEDIAN	4.989
MODE	5.000	STD DEV	2.360	VARIANCE	5.570
KURTOSIS	-0.692	SKEWNESS	0.281	RANGE	9.000
MINIMUM	1.000	MAXIMUM	10.000		
VALID CASES	278	MISSING CASES	8		

ROTANTTP Individuals Rank Ordering of the Job Related Activity.. Non Tactical Training..In Terms of the Amount of Time They Presently Dedicate to that Activity

Category Label	Code	Absolute Frequency	Relative Frequency Percent	Adjusted Frequency Percent	Cumulative Frequency Percent
Greatest Amount of Time	1.	3	1.0	1.1	1.1
Less Time	2.	9	3.1	3.2	4.3
Less Time	3.	12	4.2	4.3	8.6
Less Time	4.	27	9.4	9.7	18.3
Less Time	5.	51	17.8	18.3	36.7
Less Time	6.	44	15.4	15.8	52.5
Less Time	7.	47	16.4	16.9	69.4
Less Time	8.	34	11.9	12.2	81.7
Less Time	9.	38	13.3	13.7	95.3
Least Amount of Time	10.	13	4.5	4.7	100.0
	0.	8	2.8	Missing	100.0
	Total	286	100.0	100.0	

Valid Cases 278 Missing Cases 8

ROTANTTP INDIVIDUALS' RANK ORDERING OF THE JOB RELATED ACTIVITY...
NON TACTICAL TRAINING...IN TERMS OF THE AMOUNT OF TIME
THEY PRESENTLY DEDICATE TO THAT ACTIVITY



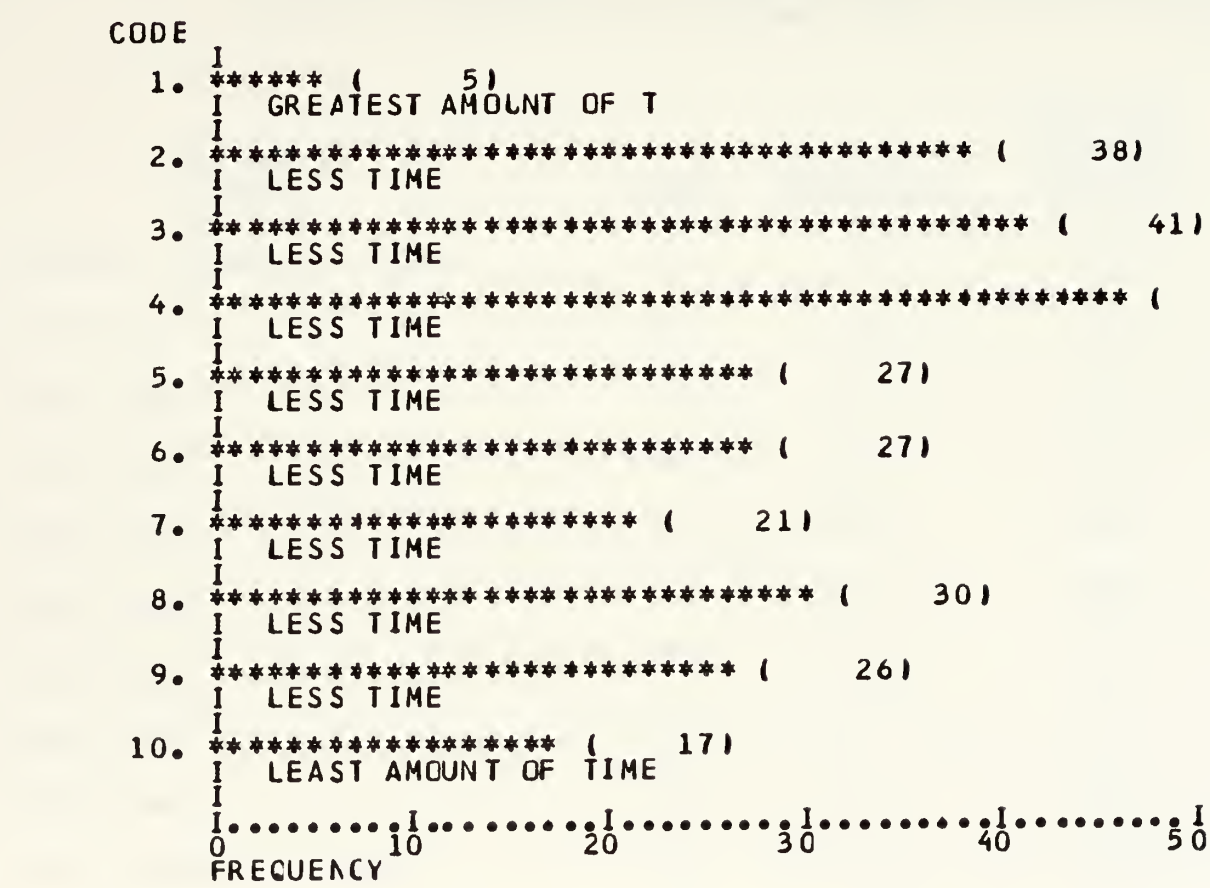
MEAN	6.320	STD ERR	0.124	MEDIAN	6.341
MODE	5.000	STD DEV	2.073	VARIANCE	4.298
KURTOSIS	-0.525	SKEWNESS	-0.211	RANGE	9.000
MINIMUM	1.000	MAXIMUM	10.000		
VALID CASES	278	MISSING CASES	8		

ROTAPEMP Individuals' Rank Ordering of the Job Related Activity... Personnel Management...In Terms of the Amount of Time They Presently Dedicate to that Activity

Category Label	Code	Absolute Frequency	Relative Frequency Percent	Adjusted Frequency Percent	Cumulative Frequency Percent
Greatest Amount of Time	1.	5	1.7	1.8	1.8
Less Time	2.	38	13.3	13.7	15.5
Less Time	3.	41	14.3	14.7	30.2
Less Time	4.	46	16.1	16.5	46.8
Less Time	5.	27	9.4	9.7	56.5
Less Time	6.	27	9.4	9.7	66.2
Less Time	7.	21	7.3	7.6	73.7
Less Time	8.	30	10.5	10.8	84.5
Less Time	9.	26	9.1	9.4	93.9
Least Amount of Time	10.	17	5.9	6.1	100.0
	0.	8	2.8	Missing	100.0
	Total	286	100.0	100.0	

Valid Cases 278 Missing Cases 8

ROTAPEMP INDIVIDUALS' RANK ORDERING OF THE JOB RELATED ACTIVITY... PERSONNEL MANAGEMENT...IN TERMS OF THE AMOUNT OF TIME THEY PRESENTLY DEDICATE TO THAT ACTIVITY



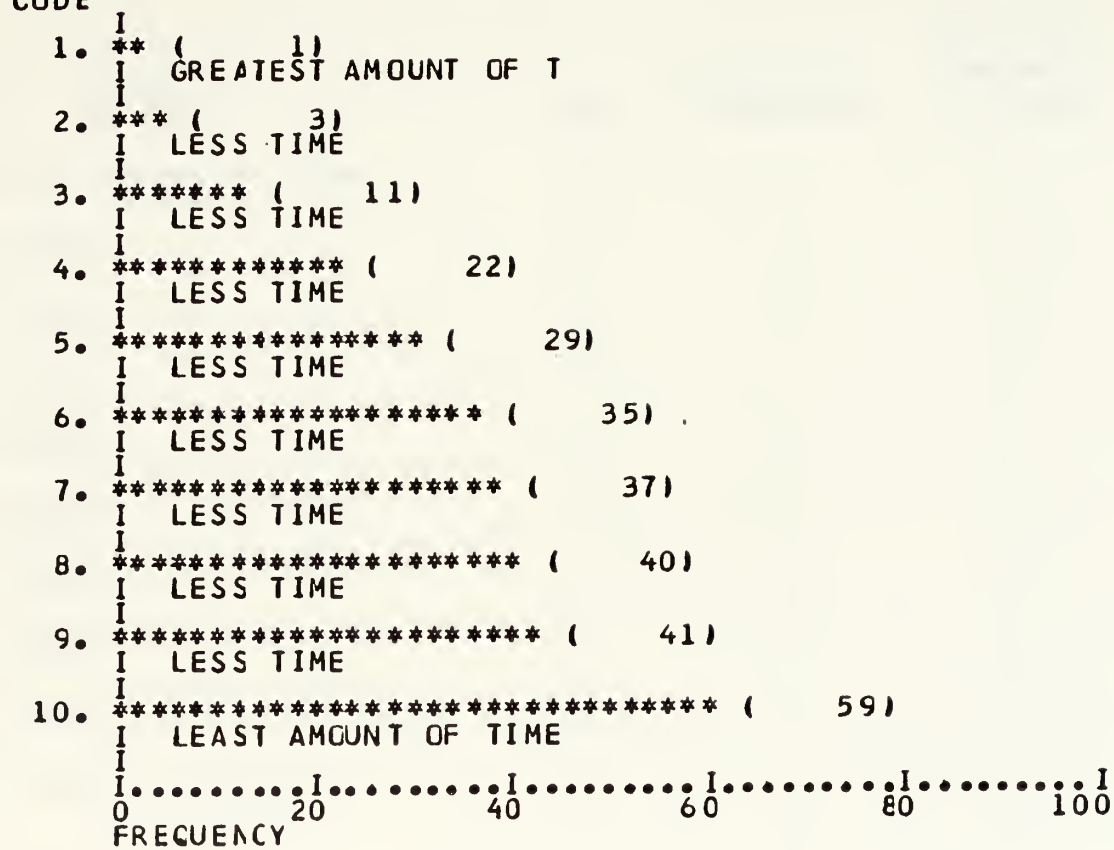
MEAN	5.309	STD ERR	0.154	MEDIAN	4.833
MODE	4.000	STD DEV	2.568	VARIANCE	6.597
KURTOSIS	-1.135	SKEWNESS	0.294	RANGE	9.000
MINIMUM	1.000	MAXIMUM	10.000		
VALID CASES	278	MISSING CASES	8		

ROTAPRMP Individuals' Rank Ordering of the Job Related Activity... Program Management...In Terms of the Amount of Time They Presently Dedicate to that Activity

Category Label	Code	Absolute Frequency	Relative Frequency Percent	Adjusted Frequency Percent	Cumulative Frequency Percent
Greatest Amount of Time	1.	1	0.3	0.4	0.4
Less Time	2.	3	1.0	1.1	1.4
Less Time	3.	11	3.8	4.0	5.4
Less Time	4.	22	7.7	7.9	13.3
Less Time	5.	29	10.1	10.4	23.7
Less Time	6.	35	12.2	12.6	36.3
Less Time	7.	37	12.9	13.3	49.6
Less Time	8.	40	14.0	14.4	64.0
Less Time	9.	41	14.3	14.7	78.8
Least Amount of Time	10.	59	20.6	21.2	100.0
	0.	8	2.8	Missing	100.0
	Total	286	100.0	100.0	

Valid CAses 278 Missing Cases 8

ROTAPRMP INDIVIDUALS' RANK ORDERING OF THE JOB RELATED ACTIVITY... PROGRAM MANAGEMENT...IN TERMS OF THE AMOUNT OF TIME THEY PRESENTLY DEDICATE TO THAT ACTIVITY



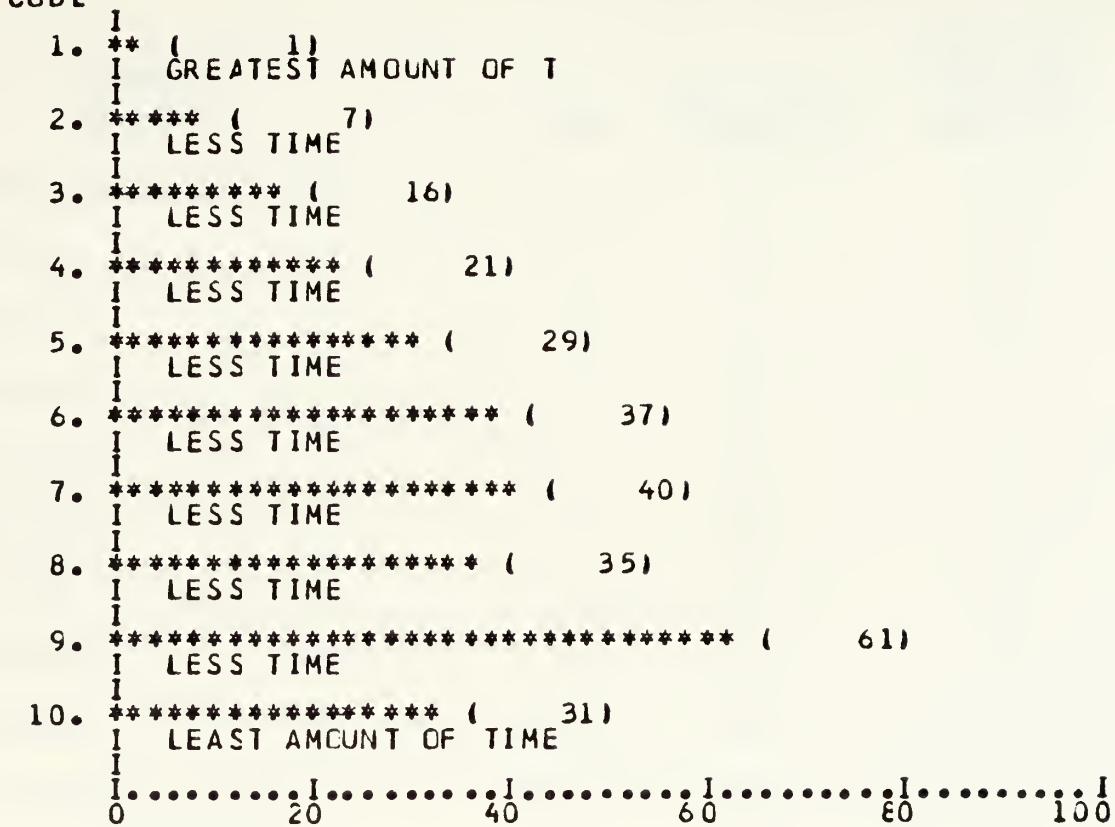
MEAN	7.270	STD ERR	0.132	MEDIAN	7.525
MODE	10.000	STD DEV	2.208	VARIANCE	4.876
KURTOSIS	-0.776	SKEWNESS	-0.437	RANGE	9.000
MINIMUM	1.000	MAXIMUM	10.000		
VALID CASES	278	MISSING CASES	8		

ROTAMMP Individuals' Rank Ordering of the Job Related Activity... Material Management...In Terms of the Amount of Time They Presently Dedicate to that Activity

Category Label	Code	Absolute Frequency	Relative Frequency Percent	Adjusted Frequency Percent	Cumulative Frequency Percent
Greatest Amount of Time	1.	1	0.3	0.4	0.4
Less Time	2.	7	2.4	2.5	2.9
Less Time	3.	16	5.6	5.8	8.6
Less Time	4.	21	7.3	7.6	16.2
Less Time	5.	29	10.1	10.4	26.6
Less Time	6.	37	12.9	13.3	39.9
Less Time	7.	40	14.0	14.4	54.3
Less Time	8.	35	12.2	12.6	66.9
Less Time	9.	61	21.3	21.9	88.8
Least Amount of Time	10.	31	10.8	11.2	100.0
	0.	8	2.8	Missing	100.0
	Total	286	100.0	100.0	

Valid Cases 278 Missing Cases 8

ROTAMMP INDIVICUALS" RANK CRDERING OF THE JOB RELATED ACTIVITY... MATERIAL MANAGEMENT...IN TERMS OF THE AMOUNT OF TIME THEY DEDICATE TO THAT ACTIVITY



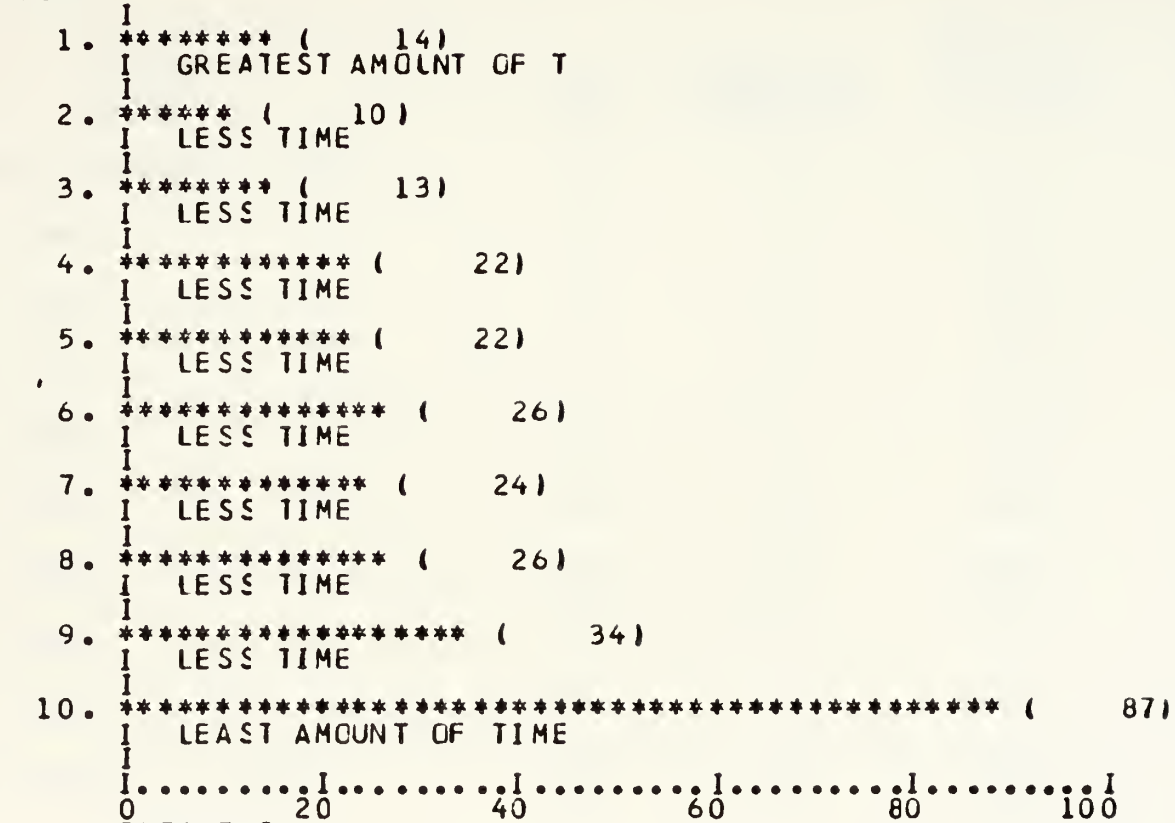
MEAN	6.953	STD ERR	0.133	MEDIAN	7.200
MODE	9.000	STD DEV	2.221	VARIANCE	4.933
KURTOSIS	-0.727	SKEWNESS	-0.464	RANGE	9.000
MINIMUM	1.000	MAXIMUM	10.000		
VALID CASES	278	MISSING CASES	8		

ROTAWP Individuals' Rank Ordering of the Job Related Activity... Watchstanding...In Terms of the Amount of Time They Presently Dedicate to that Activity

Category Label	Code	Absolute Frequency	Relative Frequency Percent	Adjusted Frequency Percent	Cumulative Frequency Percent
Greatest Amount of Time	1.	14	4.9	5.0	5.0
Less Time	2.	10	3.5	3.6	8.6
Less Time	3.	13	4.5	4.7	13.3
Less Time	4.	22	7.7	7.9	21.2
Less Time	5.	22	7.7	7.9	29.1
Less Time	6.	26	9.1	9.4	38.5
Less Time	7.	24	8.4	8.6	47.1
Less Time	8.	26	9.1	9.4	56.5
Less Time	9.	34	11.9	12.2	68.7
Least Amount of Time	10.	87	30.4	31.3	100.0
	0.	8	2.8	Missing	100.0
	Total	286	100.0	100.0	

Valid Cases 278 Missing Cases 8

ROTAWP INDIVIDUALS' RANK ORDERING OF THE JOB RELATED ACTIVITY... WATCHSTANDING...IN TERMS OF THE AMOUNT OF TIME THEY PRESENTLY DEDICATE TO THAT ACTIVITY



MEAN	7.115	STD ERR	0.170	MEDIAN	7.808
MODE	10.000	STD DEV	2.828	VARIANCE	7.997
KURTOSIS	-0.769	SKEWNESS	-0.650	RANGE	9.000
MINIMUM	1.000	MAXIMUM	10.000		
VALID CASES	278	MISSING CASES	8		

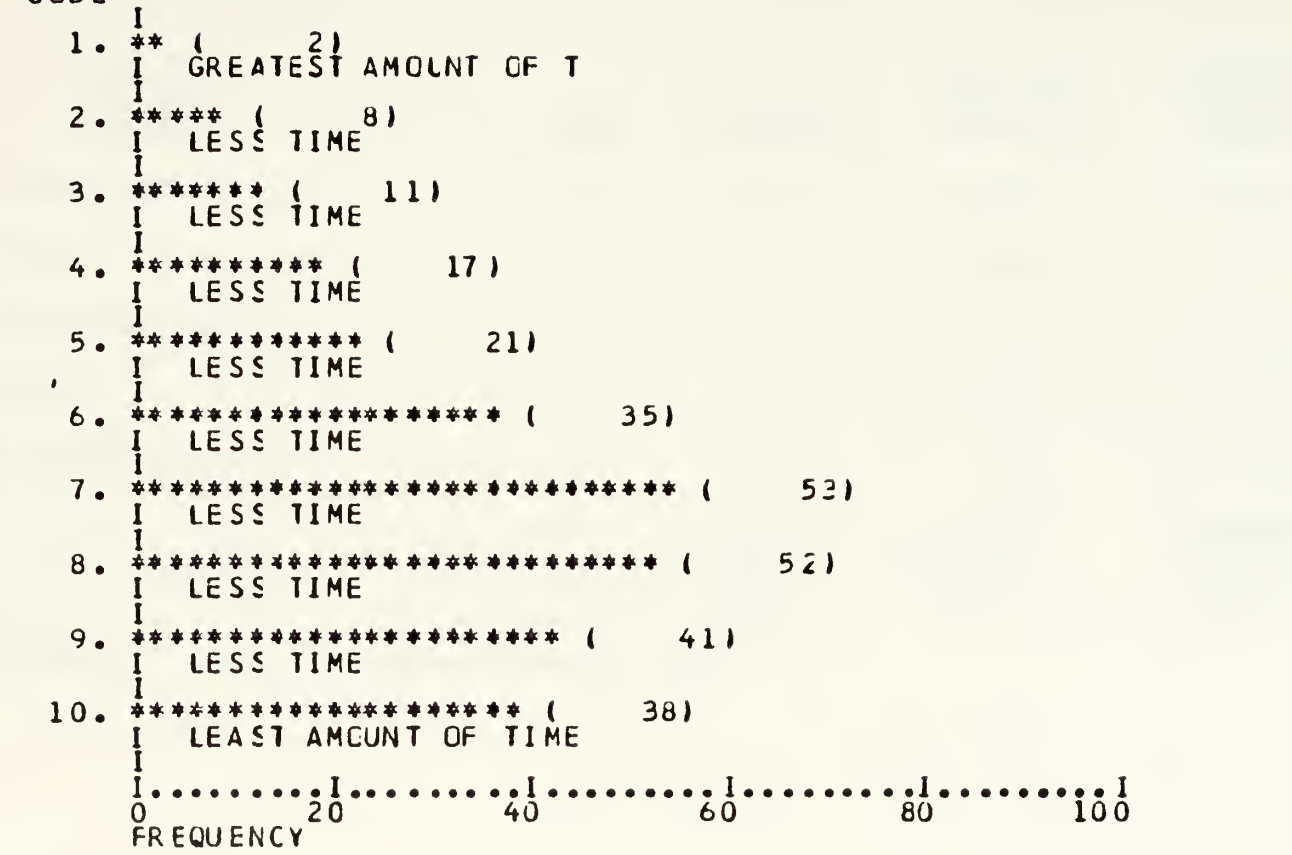
ROTAPPQP Individuals' Rank Ordering of the Job Related Activity.. Personnel Professional Qualifications, In Terms of the Amount of Time They Presently Dedicated to that Activity

QUESTION 165

Category Label	Code	Absolute Frequency	Relative Frequency Percent	Adjusted Frequency Percent	Cumulative Frequency Percent
Greatest Amount of Time	1.	2	0.7	0.7	0.7
Less Time	2.	8	2.8	2.9	3.6
Less Time	3.	11	3.8	4.0	7.6
Less Time	4.	17	5.9	6.1	13.7
Less Time	5.	21	7.3	7.6	21.2
Less Time	6.	35	12.2	12.6	33.8
Less Time	7.	53	18.5	19.1	52.9
Less Time	8.	52	18.2	18.7	71.6
Less Time	9.	41	14.3	14.7	86.3
Least Amount of Time	10.	38	13.3	13.7	100.0
	0.	8	2.8	Missing	100.0
	Total	286	100.0	100.0	

Valid Cases 278 Missing Cases 8

ROTAPPQP INDIVIDUALS' RANK ORDERING OF THE JOB RELATED ACTIVITY... PERSONNEL PROFESSIONAL QUALIFICATIONS...IN TERMS OF THE AMOUNT OF TIME THEY PRESENTLY DEDICATE TO THAT ACTIVITY



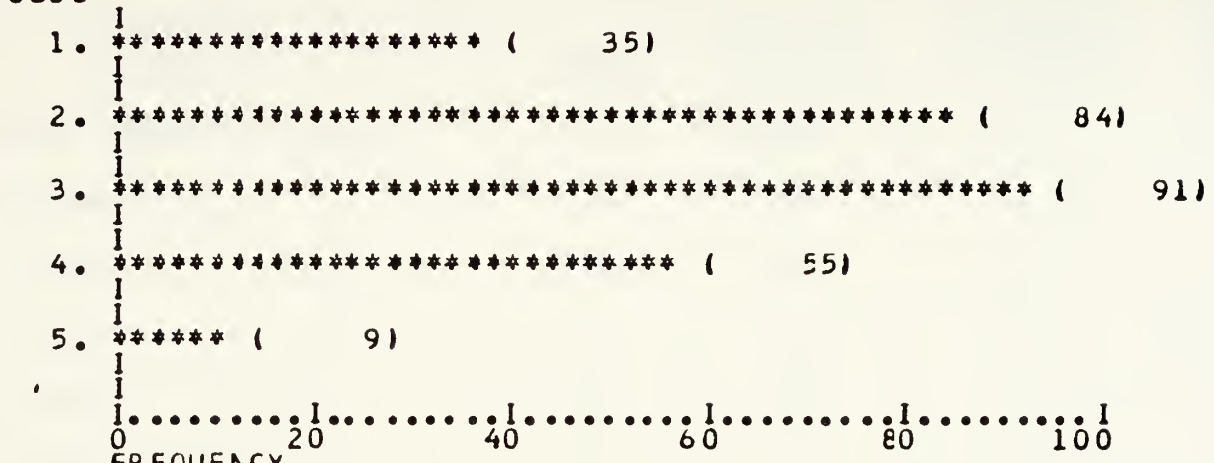
MEAN	7.066	STD ERR	0.129	MEDIAN	7.349
MODE	7.000	STD DEV	2.146	VARIANCE	4.606
KURTOSIS	-0.167	SKEWNESS	-0.634	RANGE	9.000
MINIMUM	1.000	MAXIMUM	10.000		
VALID CASES	278	MISSING CASES	8		

APROTA In Terms of Satisfying Command Mission Requirements Individuals' Perception as to the Appropriateness of the Time Distribution Previously Described in Questions 156-165

Category Label	Code	Absolute Frequency	Relative Frequency Percent	Adjusted Frequency Percent	Cumulative Frequency Percent
To a Great Extent	A	35	12.2	12.8	12.8
Mid Scale	B	84	29.4	30.7	43.4
To a Moderate Extent	C	91	31.8	33.2	76.6
Mid Scale	D	55	19.2	20.1	96.7
To No Extent	E	9	3.1	3.3	100.0
	&	12	4.2	Missing	100.0
	Total	286	100.0	100.0	

Valid Cases 274 Missing Cases 12

APROTA IN TERMS OF SATISFYING COMMAND REQUIRMENTS INDIVIDUALS' PERCEPTION AS TO THE APPROPRIATENESS OF THE TIME DISTRIBUTION PREVIOUSLY DESCRIBED IN QUESTIONS 156-165



MEAN	2.704	STD ERR	0.062	MEDIAN	2.698
MODE	3.000	STD DEV	1.033	VARIANCE	1.066
KURTOSIS	-0.656	SKEWNESS	0.095	RANGE	4.000
MINIMUM	1.000	MAXIMUM	5.000		
VALID CASES	274	MISSING CASES	12		

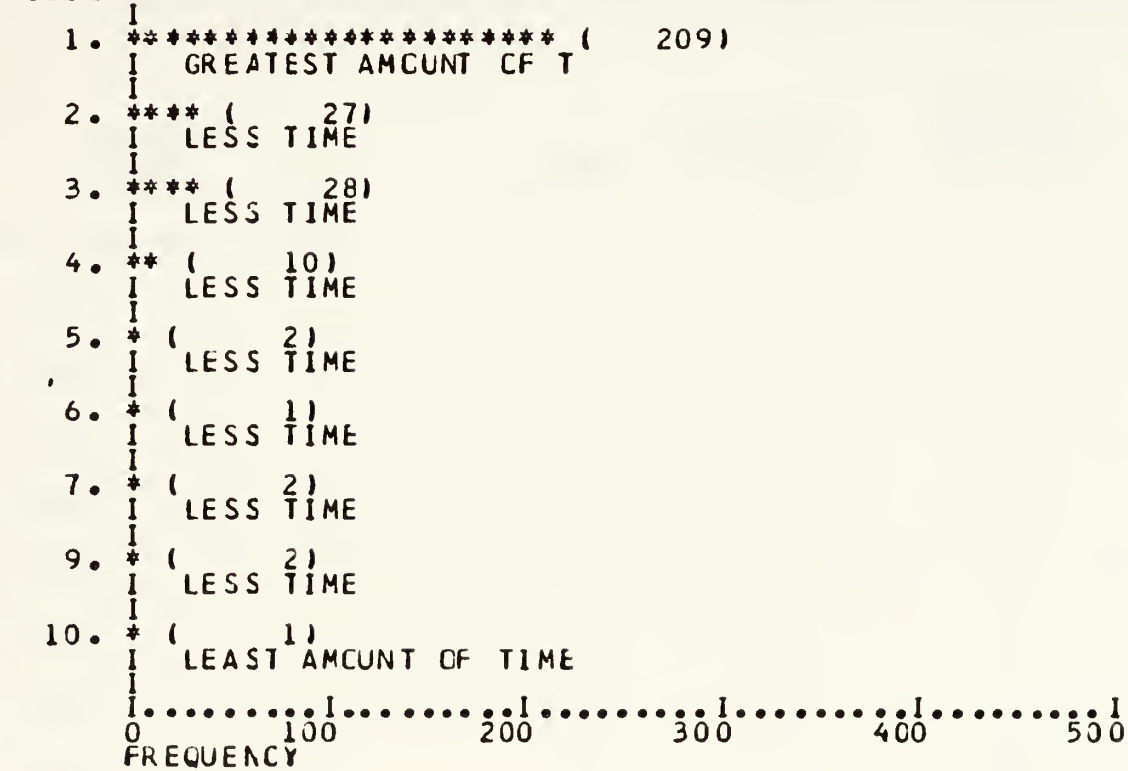
QUESTION 167

ROTAPBD Individuals' Rank Ordering of the Job Related Activity.... Primary Billet....In Terms of the Amount of Time They Perceive They Should Dedicate to that Activity

Category Label	Code	Absolute Frequency	Relative Frequency Percent	Adjusted Frequency Percent	Cumulative Frequency Percent
Greatest Amount of Time	1.	209	73.1	74.1	74.1
Less Time	2.	27	9.4	9.6	83.7
Less Time	3.	28	9.8	9.9	93.6
Less Time	4.	10	3.5	3.5	97.2
Less Time	5.	2	0.7	0.7	97.9
Less Time	6.	1	0.3	0.4	98.2
Less Time	7.	2	0.7	0.7	98.9
Less Time	9.	2	0.7	0.7	99.6
Least Amount of Time	10.	1	0.3	0.4	100.0
	0.	4	1.4	Missing	100.0
	Total	286	100.0	100.0	

Valid Cases 282 Missing Cases 4

ROTAPBD INCIVICUALS' RANK CRDERING OF THE JOB RELATED ACTIVITY...
PRIMARY BILLET...IN TERMS OF THE AMCUNT OF TIME THEY
PERCIEVE THEY SHOULD DEDICATE TO THAT ACTIVITY



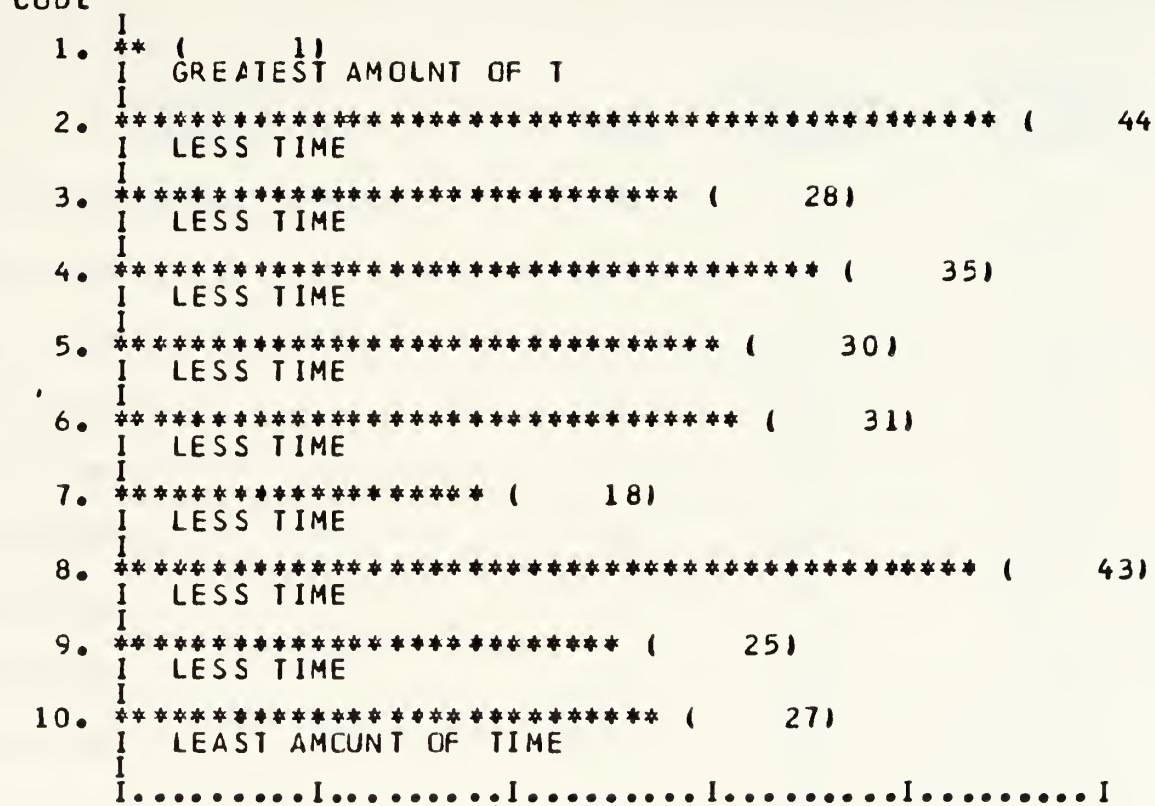
MEAN	1.578	STD ERR	0.077	MEDIAN	1.175
MODE	1.000	STD DEV	1.297	VARIANCE	1.683
KURTOSIS	14.906	SKEWNESS	3.424	RANGE	9.000
MINIMUM	1.000	MAXIMUM	10.000		
VALID CASES	282	MISSING CASES	4		

ROTACDD Individuals' Rank Ordering of the Job Related Activity... Collateral Duties...In Terms of the Amount of Time They Perceive They Should Dedicate to that Activity

Category Label	Code	Absolute Frequency	Relative Frequency Percent	Adjusted Frequency Percent	Cumulative Frequency Percent
Greatest Amount of Time	1.	1	0.3	0.4	0.4
Less Time	2.	44	15.4	15.6	16.0
Less Time	3.	28	9.8	9.9	25.9
Less Time	4.	35	12.2	12.4	38.3
Less Time	5.	30	10.5	10.6	48.9
Less Time	6.	31	10.8	11.0	59.9
Less Time	7.	18	6.3	6.4	66.3
Less Time	8.	43	15.0	15.2	81.6
Less Time	9.	25	8.7	8.9	90.4
Least Amount of Time	10.	27	9.4	9.6	100.0
	0.	4	1.4	Missing	100.0
	Total	286	100.0	100.0	

Valid Cases 282 Missing Cases 4

ROTACDD INDIVIDUALS' RANK ORDERING OF THE JOB RELATED ACTIVITY... COLLATERAL DUTIES...IN TERMS OF THE AMOUNT OF TIME THEY PERCEIVE THEY SHOULD DEDICATE TO THAT ACTIVITY



MEAN	5.723	STD ERR	0.158	MEDIAN	5.597
MODE	2.000	STD DEV	2.652	VARIANCE	7.034
KURTOSIS	-1.274	SKEWNESS	0.078	RANGE	9.000
MINIMUM	1.000	MAXIMUM	10.000		

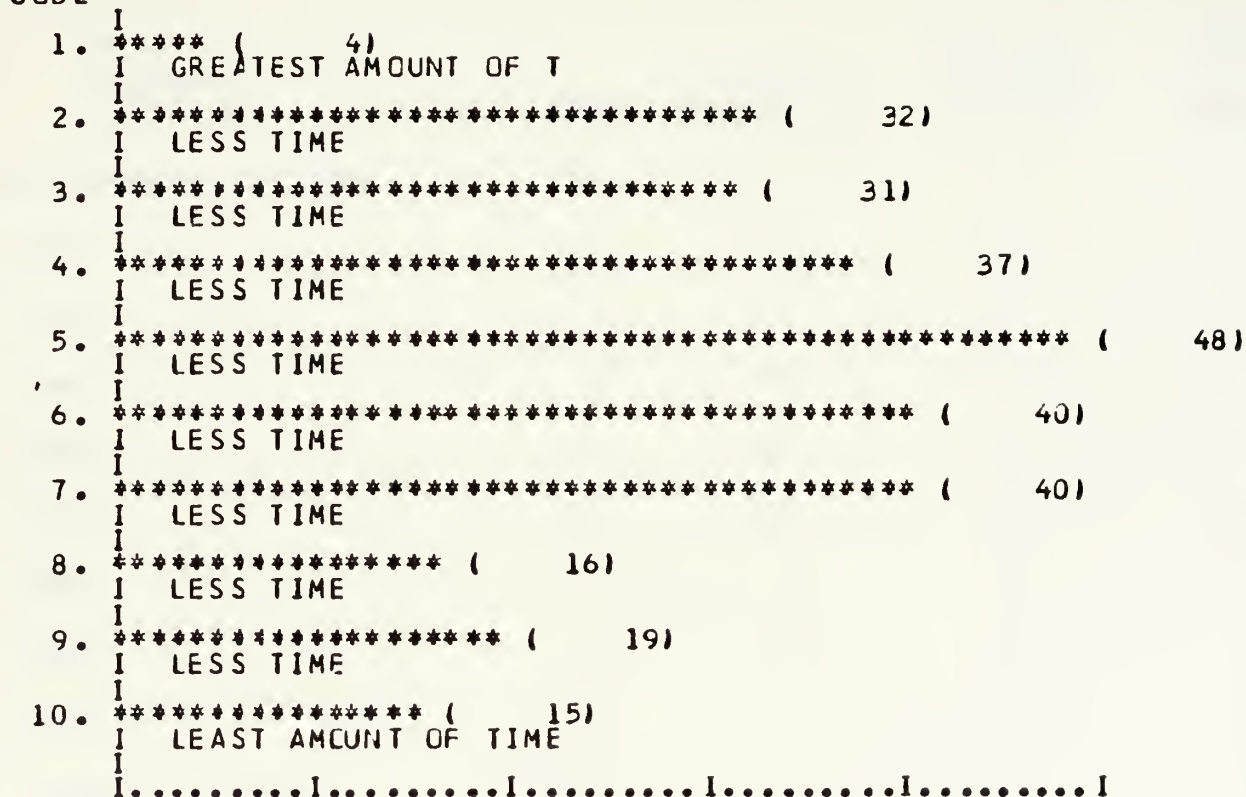
VALID CASES 282 MISSING CASES 4

ROTAARD Individuals' Rank Ordering of the Job Related Activity... Admin Requirements...In Terms of the Amount of Time They Perceive They Should Dedicate to that Activity

Category Label	Code	Absolute Frequency	Relative Frequency Percent	Adjusted Frequency Percent	Cumulative Frequency Percent
Greatest Amount of Time	1.	4	1.4	1.4	1.4
Less Time	2.	32	11.2	11.3	12.8
Less Time	3.	31	10.8	11.0	23.8
Less Time	4.	37	12.9	13.1	36.9
Less Time	5.	48	16.8	17.0	53.9
Less Time	6.	40	14.0	14.2	68.1
Less Time	7.	40	14.0	14.2	82.3
Less Time	8.	16	5.6	5.7	87.9
Less Time	9.	19	6.6	6.7	94.7
Least Amount of Time	10.	15	5.2	5.3	100.0
	0.	4	1.4	Missing	100.0
	Total	286	100.0	100.0	

Valid Cases 282 Missing Cases 4

ROTAARD INCIVICUALS' RANK CRDERING OF THE JOB RELATED ACTIVITY...
ADMIN REQUIRMENTS...IN TERMS OF THE AMOUNT CF TIME THEY
PERCEIVE THEY SHOULD DEDICATE TO THAT ACTIVITY



MEAN	5.383	STD ERR	0.137	MEDIAN	5.271
MODE	5.000	STD DEV	2.306	VARIANCE	5.319
KURTOSIS	-0.732	SKEWNESS	0.218	RANGE	9.000
MINIMUM	1.000	MAXIMUM	10.000		

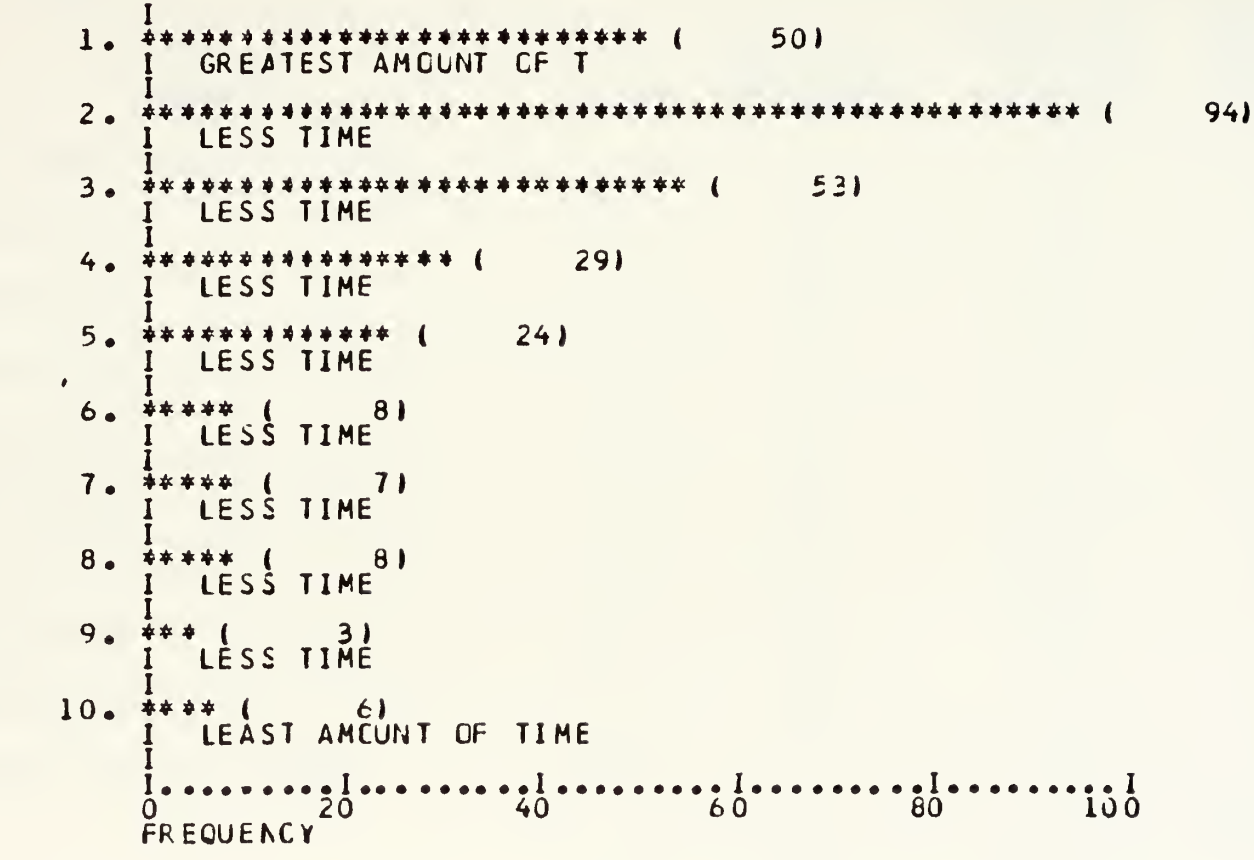
VALID CASES 282 MISSING CASES 4

ROTATTD Individuals' Rank Ordering of the Job Related Activity... Tactical Training...In Terms of the Amount of Time They Perceive They Should Dedicate to that Activity

Category Label	Code	Absolute Frequency	Relative Frequency Percent	Adjusted Frequency Percent	Cumulative Frequency Percent
Greatest Amount of Time	1.	50	17.5	17.7	17.7
Less Time	2.	94	32.9	33.3	51.1
Less Time	3.	53	18.5	18.8	69.9
Less Time	4.	29	10.1	10.3	80.1
Less Time	5.	24	8.4	8.5	88.7
Less Time	6.	8	2.8	2.8	91.5
Less Time	7.	7	2.4	2.5	94.0
Less Time	8.	8	2.8	2.8	96.8
Less Time	9.	3	1.0	1.1	97.9
Least Amount of Time	10.	6	2.1	2.1	100.0
	0.	4	1.4	Missing	100.0
	Total	286	100.0	100.0	

Valid Cases 282 Missing Cases 4

ROTATTD INDIVIDUALS' RANK ORDERING OF THE JOB RELATED ACTIVITY...
TACTICAL TRAINING...IN TERMS OF THE AMOUNT OF TIME THEY
PERCEIVE THEY SHOULD DEDICATE TO THAT ACTIVITY



MEAN	3.124	STD ERR	0.123	MEDIAN	2.468
MODE	2.000	STD DEV	2.067	VARIANCE	4.273
KURTOSIS	1.970	SKEWNESS	1.481	RANGE	9.000
MINIMUM	1.000	MAXIMUM	10.000		

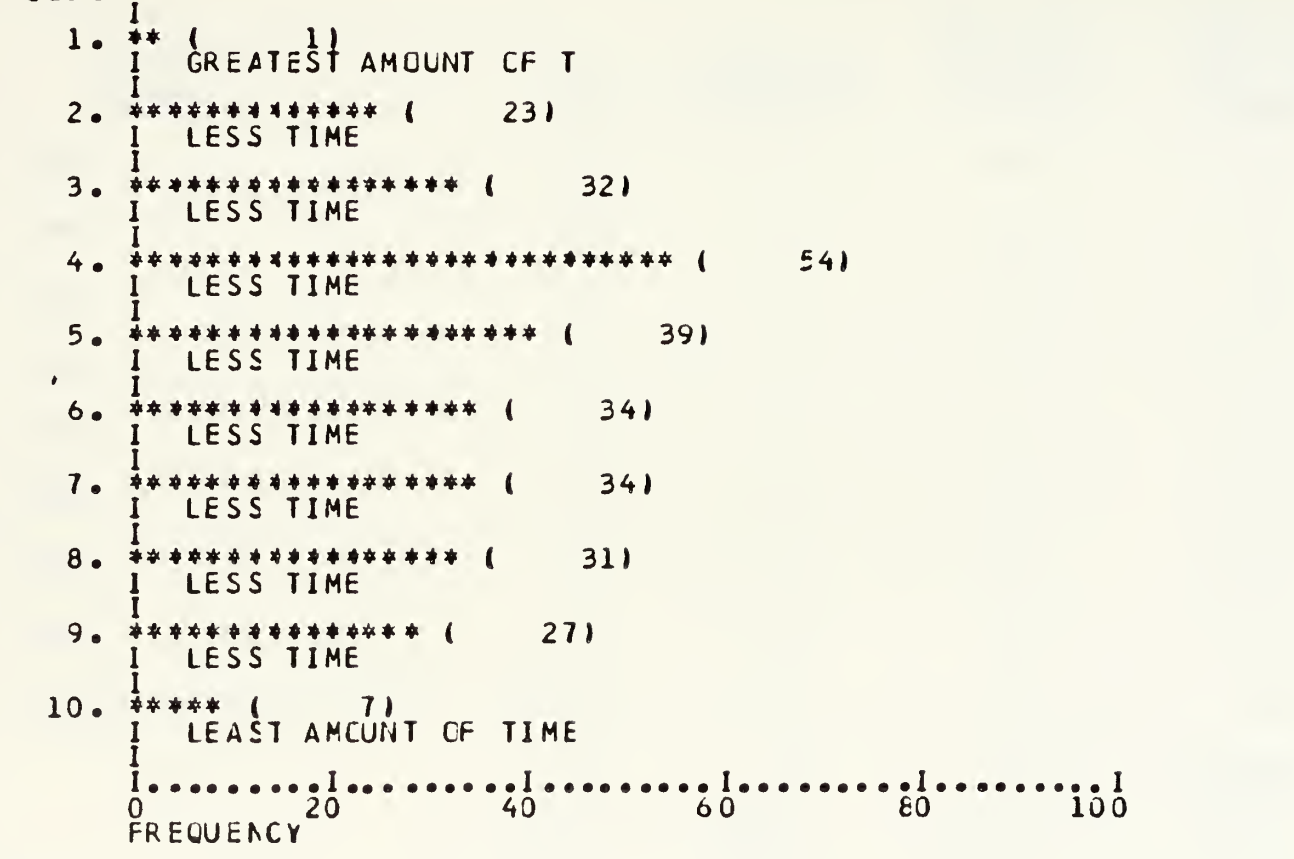
VALID CASES 282 MISSING CASES 4

ROTANTTD Individuals' Rank Ordering of the Job Related Activity... Non Tactical Training...In Terms of the Amount of Time They Perceive They Should Dedicate to that Activity

Category Label	Code	Absolute Frequency	Relative Frequency Percent	Adjusted Frequency Percent	Cumulative Frequency Percent
Greatest Amount of Time	1.	1	0.3	0.4	0.4
Less Time	2.	23	8.0	8.2	8.5
Less Time	3.	32	11.2	11.3	19.9
Less Time	4.	54	18.9	19.1	39.0
Less Time	5.	39	13.6	13.8	52.8
Less Time	6.	34	11.9	12.1	64.9
Less Time	7.	34	11.9	12.1	77.0
Less Time	8.	31	10.8	11.0	87.9
Less Time	9.	27	9.4	9.6	97.5
Least Amount of Time	10.	7	2.4	2.5	100.0
	0.	4	1.4	Missing	100.0
	Total	286	100.0	100.0	

Valid Cases 282 Missing Cases 4

ROTANTTD INCIVICLALS' RANK CRDERING OF THE JOB RELATED ACTIVITY... NON TACTICAL TRAINING...IN TERMS OF THE AMCLNT OF TIME THEY PERCEIVE THEY SHOULD DEDICATE TO THAT ACTIVITY



MEAN	5.521	STD ERR	0.132	MEDIAN	5.295
MODE	4.000	STD DEV	2.220	VARIANCE	4.927
KURTOSIS	-0.589	SKEWNESS	0.179	RANGE	9.000
MINIMUM	1.000	MAXIMUM	10.000		

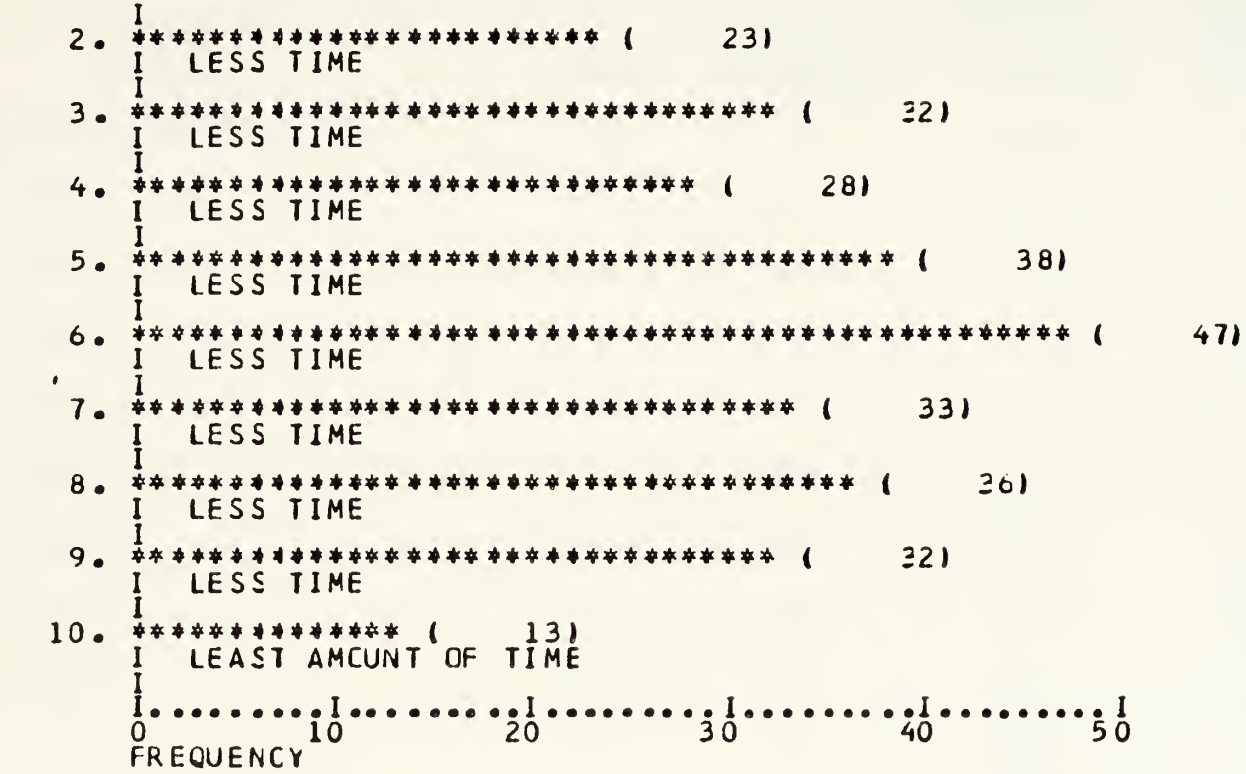
VALID CASES 282 MISSING CASES 4

ROTAPEMD Individuals' Rank Ordering of the Job Related Activity... Personnel Management...In Terms of the Amount of Time They Perceive They Should Dedicate to that Activity

Category Label	Code	Absolute Frequency	Relative Frequency Percent	Adjusted Frequency Percent	Cumulative Frequency Percent
Less Time	2.	23	8.0	8.2	8.2
Less Time	3.	32	11.2	11.3	19.5
Less Time	4.	28	9.8	9.9	29.4
Less Time	5.	38	13.3	13.5	42.9
Less Time	6.	47	16.4	16.7	59.6
Less Time	7.	33	11.5	11.7	71.3
Less Time	8.	36	12.6	12.8	84.0
Less Time	9.	32	11.2	11.3	95.4
Least Amount of Time	10.	13	4.5	4.6	100.0
	0.	4	1.4	Missing	100.0
	Total	286	100.0	100.0	

Valid Cases 282 Missing Cases 4

ROTAPEMD INCIVICLALS' RANK CRDERING OF THE JOB RELATED ACTIVITY...
PERSONNEL MANAGEMENT...IN TERMS OF THE AMOUNT OF TIME THEY
PERCEIVE THEY SHOULD DEDICATE TO THAT ACTIVITY



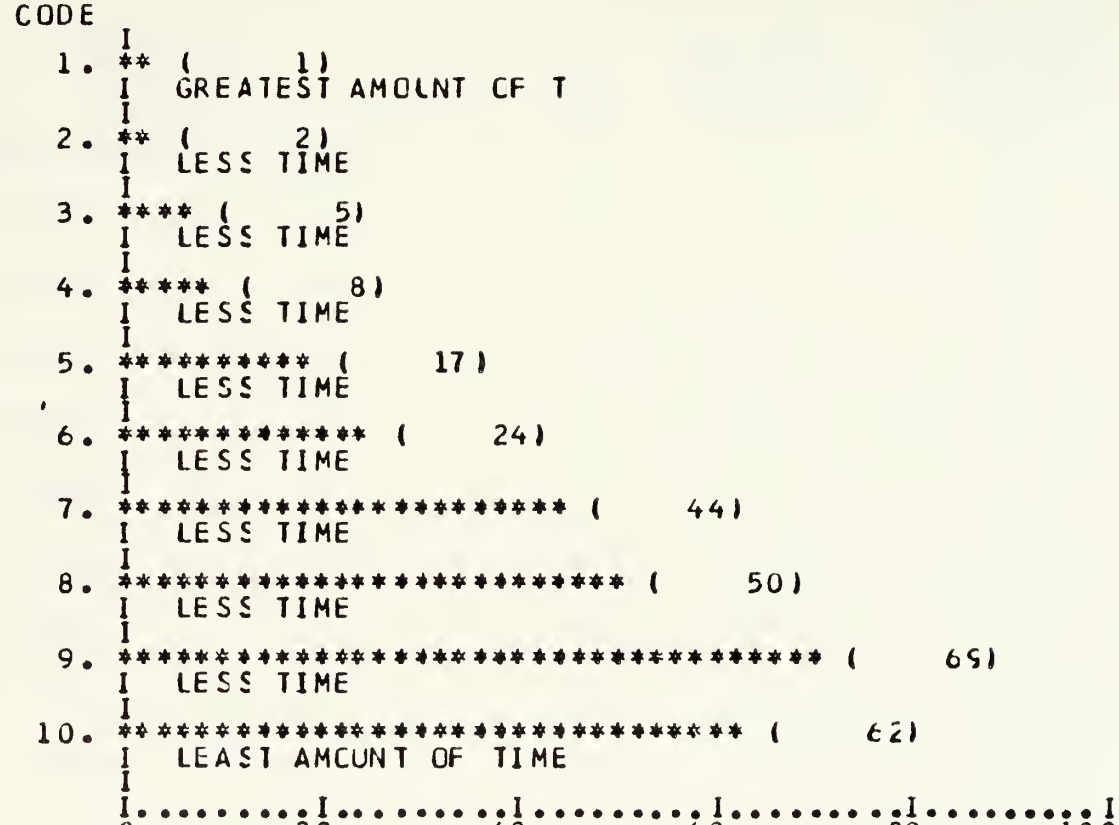
MEAN	5.897	STD ERR	0.136	MEDIAN	5.926
MODE	6.CC0	STD DEV	2.292	VARIANCE	5.253
KURTOSIS	-1.010	SKEWNESS	-0.037	RANGE	8.000
MINIMUM	2.CC0	MAXIMUM	10.000		
VALID CASES	282	MISSING CASES	4		

ROTAPRMD Individuals' Rank Ordering of the Job Related Activity... Program Management...In Terms of the Amount of Time They Perceive They Should Dedicate to that Activity

Category Label	Code	Absolute Frequency	Relative Frequency Percent	Adjusted Frequency Percent	Cumulative Frequency Percent
Greatest Amount of Time	1.	1	0.3	0.4	0.4
Less Time	2.	2	0.7	0.7	1.1
Less Time	3.	5	1.7	1.8	2.8
Less Time	4.	8	2.8	2.8	5.7
Less Time	5.	17	5.9	6.0	11.7
Less Time	6.	24	8.4	8.5	20.2
Less Time	7.	44	15.4	15.6	35.8
Less Time	8.	50	17.5	17.7	53.5
Less Time	9.	69	24.1	24.5	78.0
Least Amount of Time	10.	62	21.7	22.0	100.0
	0.	4	1.4	Missing	100.0
	Total	286	100.0	100.0	

Valid Cases 282 Missing Cases 4

ROTAPRMD INDIVICLALS' RANK CRDERING OF THE JOB RELATED ACTIVITY...
PROGRAM MANAGEMENT...IN TERMS OF THE AMCUNT OF TIME THEY
PERCEIVE THEY SHOULD DEDICATE TO THAT ACTIVITY



MEAN	7.508	STD ERR	0.111	MEDIAN	8.300
MODE	9.000	STD DEV	1.869	VARIANCE	3.493
KURTOSIS	0.641	SKEWNESS	-0.972	RANGE	9.000
MINIMUM	1.000	MAXIMUM	10.000		

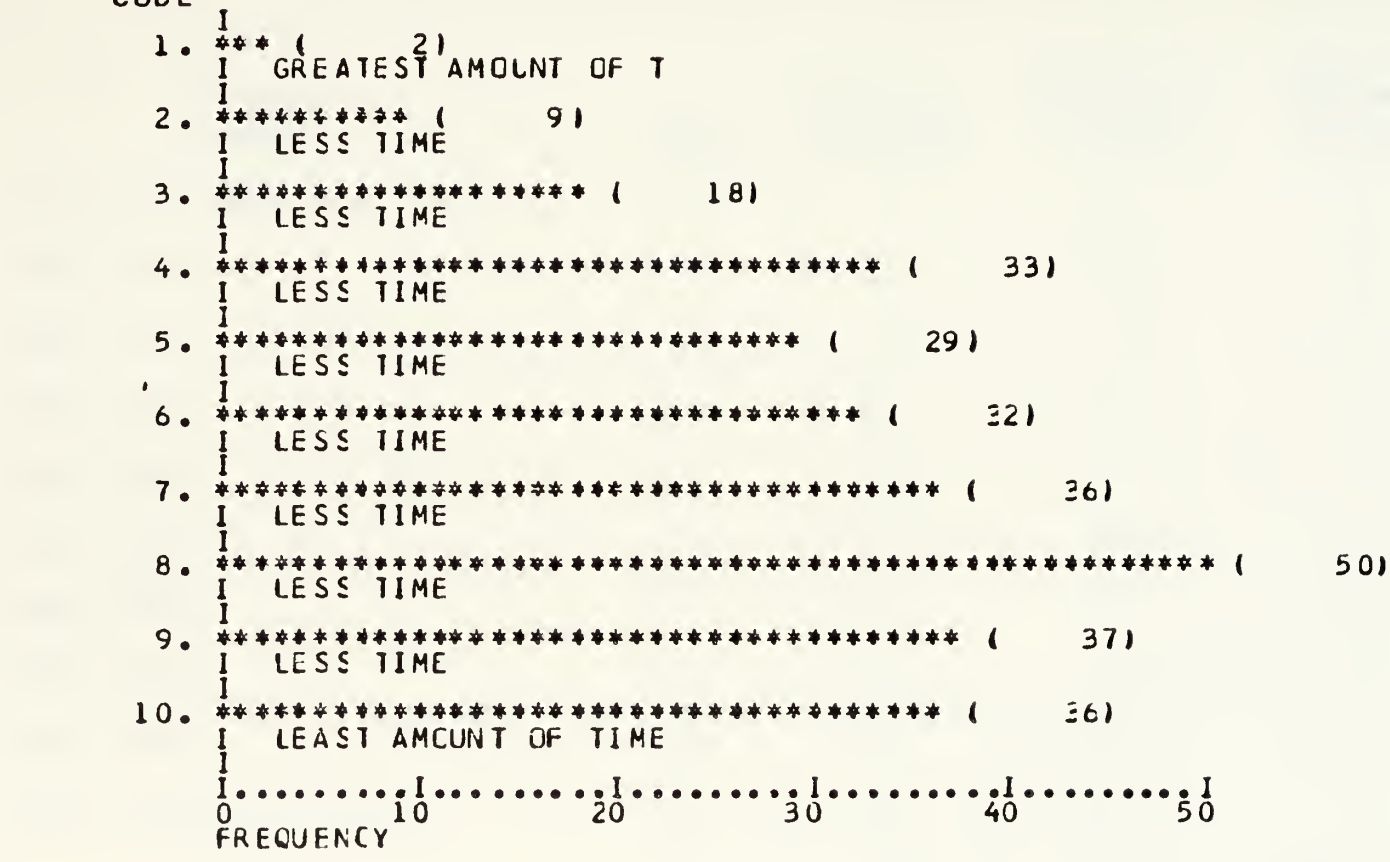
VALID CASES 282 MISSING CASES 4

ROTAMMD Individuals' Rank Ordering of the Job Related Activity... Material Management...In Terms of the Amount of Time They Perceive They Should Dedicate to that Activity

Category Label	Code	Absolute Frequency	Relative Frequency Percent	Adjusted Frequency Percent	Cumulative Frequency Percent
Greatest Amount of Time	1.	2	0.7	0.7	0.7
Less Time	2.	9	3.1	3.2	3.9
Less Time	3.	18	6.3	6.4	10.3
Less Time	4.	33	11.5	11.7	22.0
Less Time	5.	29	10.1	10.3	32.3
Less Time	6.	32	11.2	11.3	43.6
Less Time	7.	36	12.6	12.8	56.4
Less Time	8.	50	17.5	17.7	74.1
Less Time	9.	37	12.9	13.1	87.2
Least Amount of Time	10.	36	12.6	12.8	100.0
	0.	4	1.4	Missing	100.0
	Total	286	100.0	100.0	

Valid Cases 282 Missing Cases 4

ROTAMMD INDIVIDUALS' RANK ORDERING OF THE JOB RELATED ACTIVITY... MATERIAL MANAGEMENT...IN TERMS OF THE AMOUNT OF TIME THEY PERCEIVE THEY SHOULD DEDICATE TO THAT ACTIVITY



MEAN	6.695	STD ERR	0.139	MEDIAN	7.000
MODE	8.000	STD DEV	2.330	VARIANCE	5.430
KURTOSIS	-0.858	SKEWNESS	-0.324	RANGE	9.000
MINIMUM	1.000	MAXIMUM	10.000		

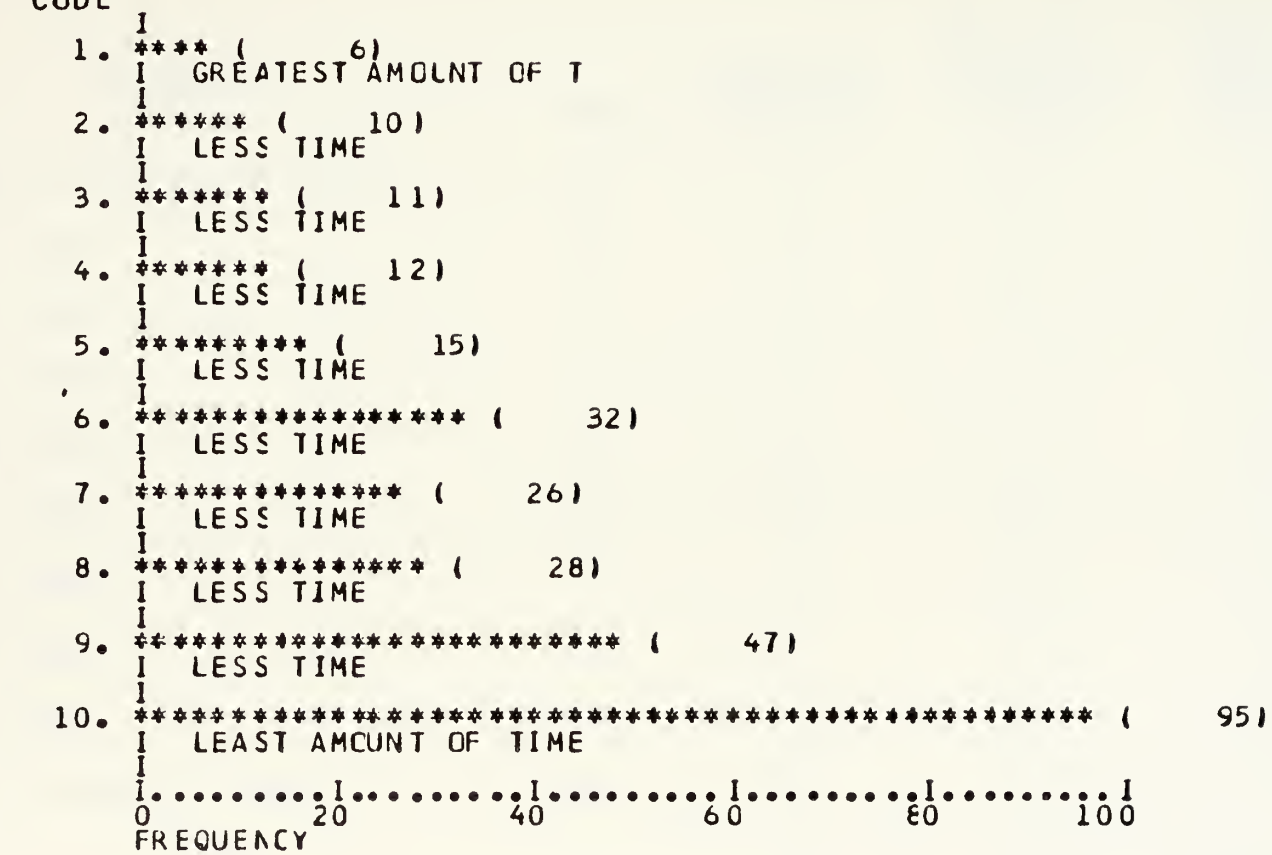
VALID CASES 282 MISSING CASES 4

ROTAWD Individuals' Rank Ordering of the Job Related Activity... Watchstanding...In Terms of the Amount of Time They Perceive They Should Dedicate to that Activity

Category Label	Code	Absolute Frequency	Relative Frequency Percent	Adjusted Frequency Percent	Cumulative Frequency Percent
Greatest Amount of Time	1.	6	2.1	2.1	2.1
Less Time	2.	10	3.5	3.5	5.7
Less Time	3.	11	3.8	3.9	9.6
Less Time	4.	12	4.2	4.3	13.8
Less Time	5.	15	5.2	5.3	19.1
Less Time	6.	32	11.2	11.3	30.5
Less Time	7.	26	9.1	9.2	39.7
Less Time	8.	28	9.8	9.9	49.6
Less Time	9.	47	16.4	16.7	66.3
Least Amount of Time	10.	95	33.2	33.7	100.0
	0.	4	1.4	Missing	100.0
	Total	286	100.0	100.0	

Valid Cases 282 Missing Cases 4

ROTAWD INDIVIDUALS' RANK ORDERING OF THE JOB RELATED ACTIVITY... WATCHSTANDING...IN TERMS OF THE AMOUNT OF TIME THEY PERCEIVE THEY SHOULD DEDICATE TO THAT ACTIVITY



MEAN	7.635	STD ERR	0.151	MEDIAN	8.521
MODE	10.000	STD DEV	2.531	VARIANCE	6.403
KURTOSIS	-0.105	SKEWNESS	-0.941	RANGE	9.000
MINIMUM	1.000	MAXIMUM	10.000		

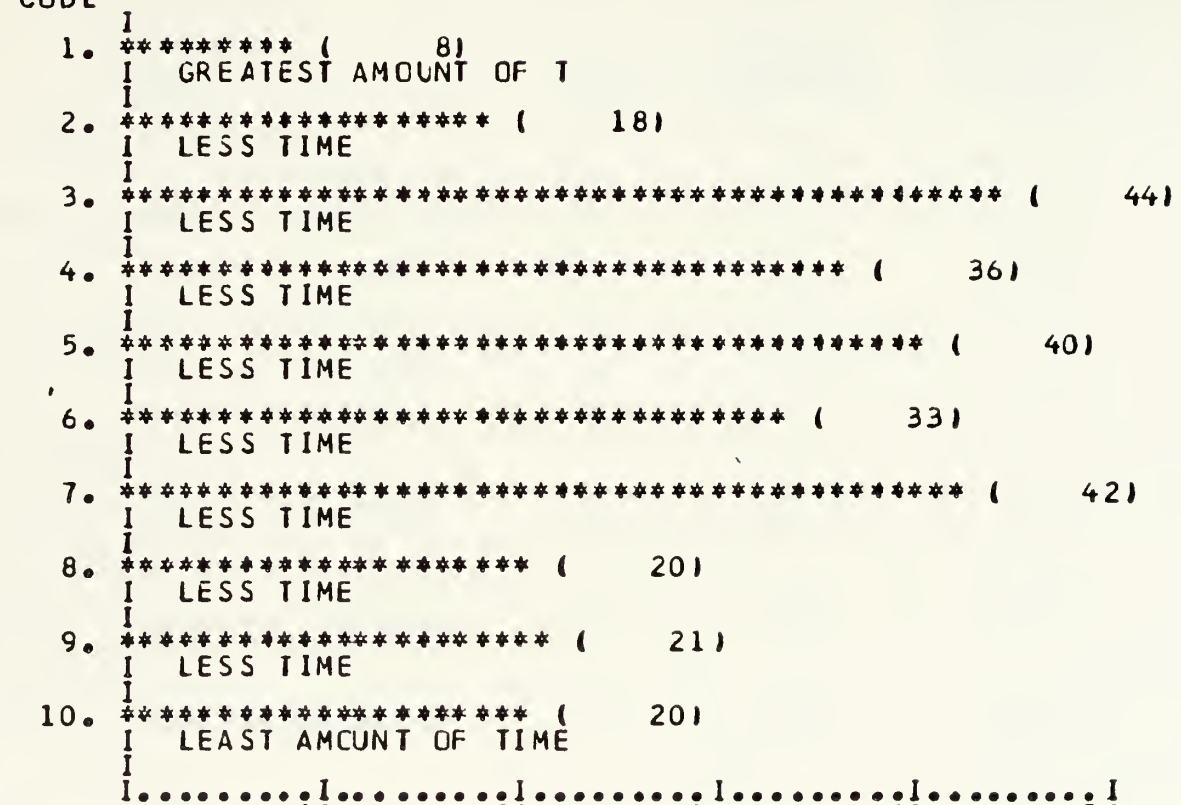
VALID CASES 282 MISSING CASES 4

ROTAPPQD Individuals' Rank Ordering of the Job Related Activity..Personnel Professional Qualifications, In Terms of the Amount of Time They Presently Dedicated to that Activity

Category Label	Code	Absolute Frequency	Relative Frequency Percent	Adjusted Frequency Percent	Cumulative Frequency Percent
Greatest Amount of Time	1.	8	2.8	2.8	2.8
Less Time	2.	18	6.3	6.4	9.2
Less Time	3.	44	15.4	15.6	24.8
Less Time	4.	36	12.6	12.8	37.6
Less Time	5.	40	14.0	14.2	51.8
Less Time	6.	33	11.5	11.7	63.5
Less Time	7.	42	14.7	14.9	78.4
Less Time	8.	20	7.0	7.1	85.5
Less Time	9.	21	7.3	7.4	92.9
Least Amount of Time	10.	20	7.0	7.1	100.0
	0.	4	1.4	Missing	100.0
	Total	286	100.0	100.0	

Valid Cases 282 Missing Cases 4

ROTAPPQD INDIVIDUALS' RANK ORDERING OF THE JOB RELATED ACTIVITY...
PERSONNEL PROFESSIONAL QUALIFICATIONS...IN TERMS OF THE AMOUNT
OF TIME THEY PERCEIVE THEY SHOULD DEDICATE TO THAT ACTIVITY



MEAN	5.555	STD ERR	0.144	MEDIAN	5.375
MODE	3.000	STD DEV	2.414	VARIANCE	5.830
KURTOSIS	-0.880	SKEWNESS	0.176	RANGE	9.000
MINIMUM	1.000	MAXIMUM	10.000		

VALID CASES 282 MISSING CASES 4

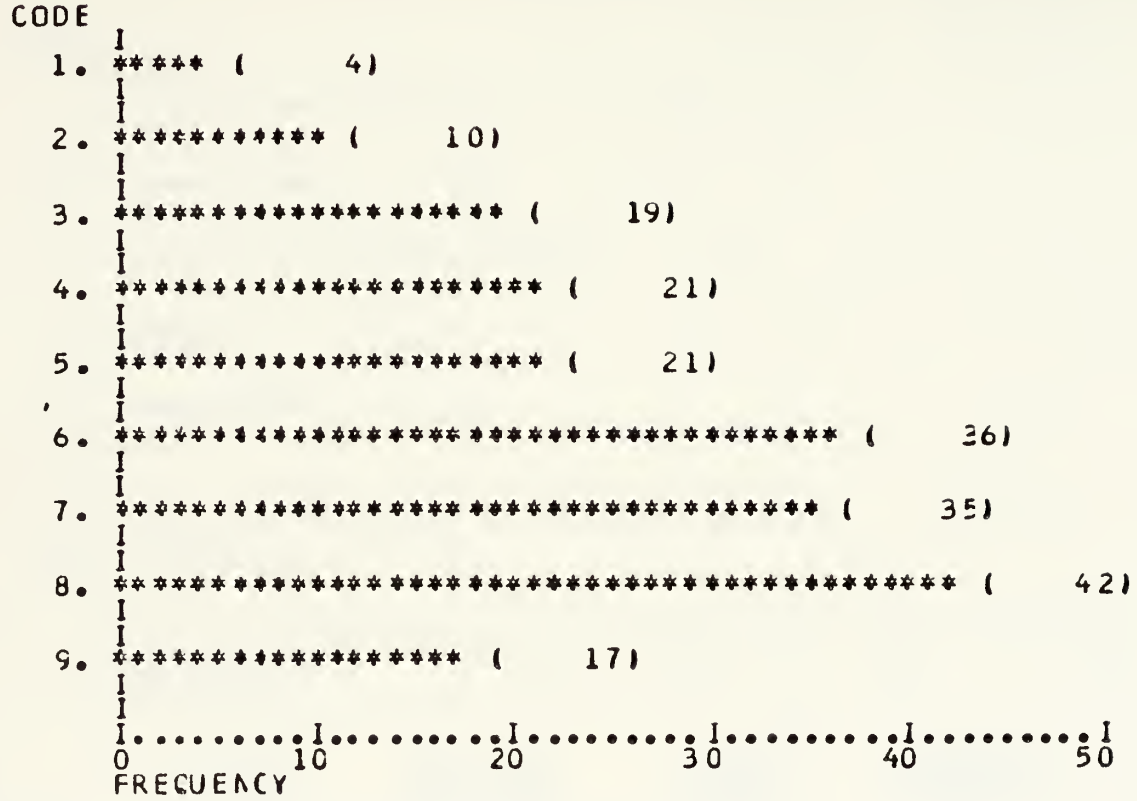
TPDIHNO Number of Hours an Individual Dedicates Per Day on the Activity Ranked Number One in Questions Number 156-165

Category Label	Code	Absolute Frequency	Relative Frequency Percent	Adjusted Frequency Percent	Cumulative Frequency Percent
Less Than 30 Minutes	A	4	1.4	1.4	1.4
> Than or Equal to 30 Minutes < than 1 Hour	B	10	3.5	3.5	4.9
> Than or Equal to 1 Hour < Than 2 Hours	C	19	6.6	6.7	11.7
> Than or Equal to 2 Hours < Than 3 Hours	D	21	7.3	7.4	19.1
> Than or Equal to 3 Hours < Than 4 Hours	E	21	7.3	7.4	26.5
> Than or Equal to 4 Hours < Than 5 Hours	F	36	12.6	12.7	39.2
> Than or Equal to 5 Hours < Than 6 Hours	G	35	12.2	12.4	51.6
> Than or Equal to 6 Hours < Than 7 Hours	H	42	14.7	14.8	66.4
> Than or Equal to 7 Hours < Than 8 Hours	I	17	5.9	6.0	72.4

Category Label	Code	Absolute Frequency	Relative Frequency Percent	Adjusted Frequency Percent	Cumulative Frequency Percent
> Than or Equal to 8 Hours < Than 9 Hours	J	20	7.0	7.1	79.5
> Than or Equal to 9 Hours < Than 10 Hours	K	10	3.5	3.5	83.0
> Than or Equal to 10 Hours < Than 11 Hours	L	23	8.0	8.1	91.2
> Than or Equal to 11 Hours < Than 12 Hours	M	6	2.1	2.1	93.3
> Than or Equal to 12 Hours < Than 13 Hours	N	9	3.1	3.2	96.5
> Than or Equal to 13 Hours < Than 14 Hours	O	1	0.3	0.4	96.8
> Than or Equal to 14 Hours	P	9	3.1	3.2	100.0
	&	3	1.0	Missing	100.0
	Total	286	100.0	100.0	

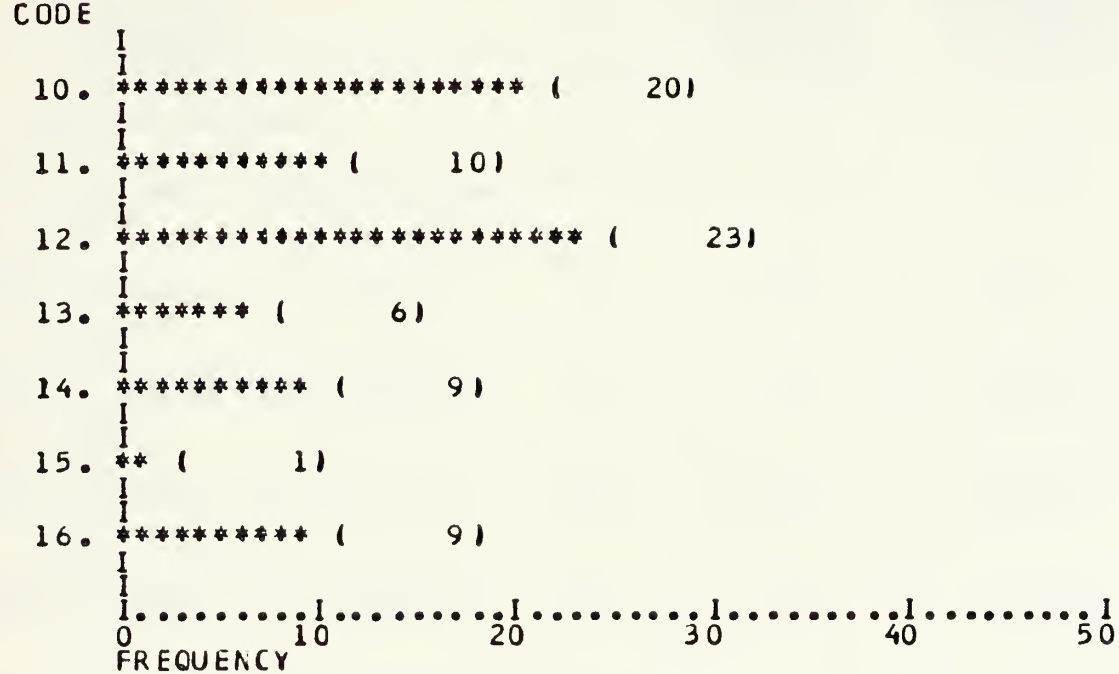
Valid Cases 283 Missing Cases 3

TAPDIHNO NUMBER CF HOURS AN INDIVIDUAL DEDICATES PER DAY ON THE ACTIVITY RANKED NUMBER ONE ON QUESTIONS NUMBER 156-165



FREQUENCY TABLE CONTINUED ON NEXT PAGE

TAPDIHNO NUMBER CF HOURS AN INDIVIDUAL DEDICATES PER DAY ON THE ACTIVITY RANKED NUMBER ONE ON QUESTIONS NUMBER 156-165 (CCNTINLED)



MEAN	7.664	STD ERR	0.205	MEDIAN	7.371
MODE	8.000	STD DEV	3.450	VARIANCE	11.905
KURTOSIS	-0.271	SKEWNESS	0.419	RANGE	15.000
MINIMUM	1.000	MAXIMUM	16.000		
VALID CASES	283	MISSING CASES	3		

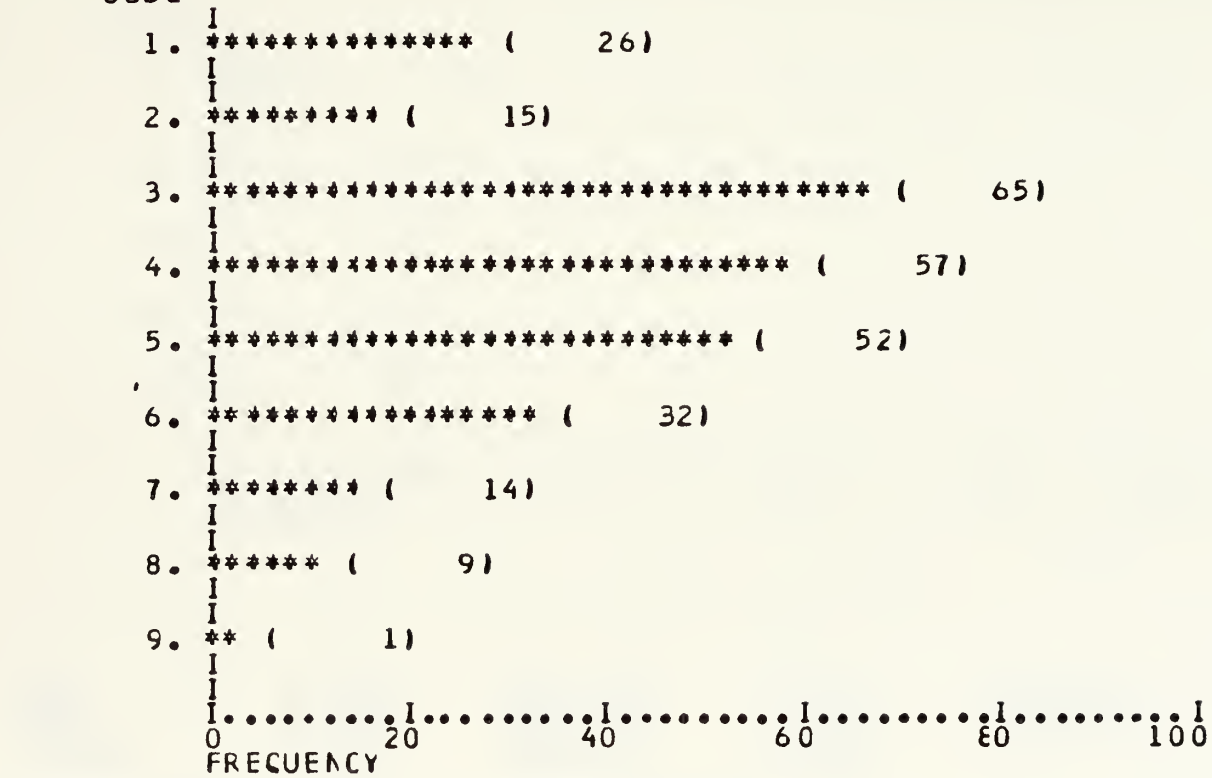
TPDIHNT Number of Hours an Individual Dedicates Per Day on the Activity Ranked Number Two in Questions Number 156-165

Category Label	Code	Absolute Frequency	Relative Frequency Percent	Adjusted Frequency Percent	Cumulative Frequency Percent
Less Than 30 Minutes	A	26	9.1	9.1	9.1
> Than or Equal to 30 Minutes < Than 1 Hour	B	15	5.2	5.3	14.4
> Than or Equal to 1 Hour < Than 2 Hours	C	65	22.7	22.8	37.2
> Than or Equal to 2 Hours < Than 3 Hours	D	57	19.9	20.0	57.2
> Than or Equal to 3 Hours < Than 4 Hours	E	52	18.2	18.2	75.4
> Than or Equal to 4 Hours < Than 5 Hours	F	32	11.2	11.2	86.7
> Than or Equal to 5 Hours < Than 6 Hours	G	14	4.9	4.9	91.6
> Than or Equal to 6 Hours < Than 7 Hours	H	9	3.1	3.2	94.7
> Than or Equal to 7 Hours < Than 8 Hours	I	1	0.3	0.4	95.1
> Than or Equal to 8 Hours < Than 9 Hours	J	7	2.4	2.5	97.5

Category Label	Code	Absolute Frequency	Relative Frequency Percent	Adjusted Frequency Percent	Cumulative Frequency Percent
> Than or Equal to 9 Hours < Than 10 Hours	K	1	0.3	0.4	97.9
> Than or Equal to 10 Hours < Than 11 Hours	L	2	0.7	0.7	98.6
> Than or Equal to 12 Hours < Than 13 Hours	N	2	0.7	0.7	99.3
> Than or Equal to 14 Hours	P	2	0.7	0.7	100.0
	&	1	0.3	Missing	100.0
	Total	286	100.0	100.0	

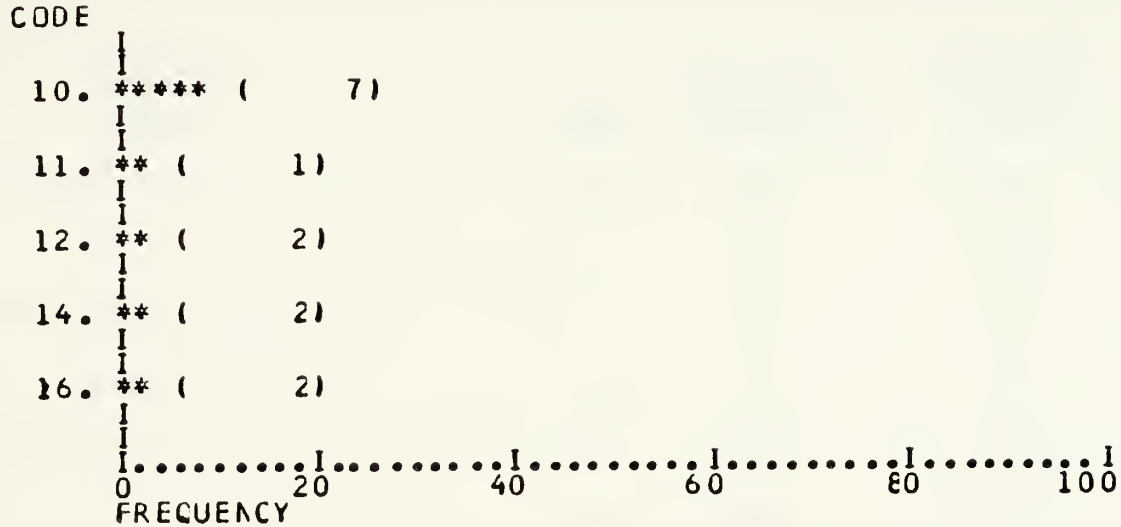
Valid Cases 285 Missing Cases 1

TPDIHNT NUMBER CF HOURS AN INDIVIDUAL DEDICATES PER DAY ON THE ACTIVITY RANKED NUMBER TWO IN QUESTIONS NUMBER 156-165



FREQUENCY TABLE CONTINUED ON NEXT PAGE

TPDIHNT NUMBER OF HOURS AN INDIVIDUAL DEDICATES PER DAY ON THE ACTIVITY RANKED NUMBER TWO IN QUESTIONS NUMBER 156-165 (CONTINUED)



MEAN	4.474	STD ERR	0.144	MEDIAN	4.140
MODE	3.000	STD DEV	2.437	VARIANCE	5.940
KURTOSIS	4.464	SKEWNESS	1.569	RANGE	15.000
MINIMUM	1.000	MAXIMUM	16.000		
VALID CASES	285	MISSING CASES	1		

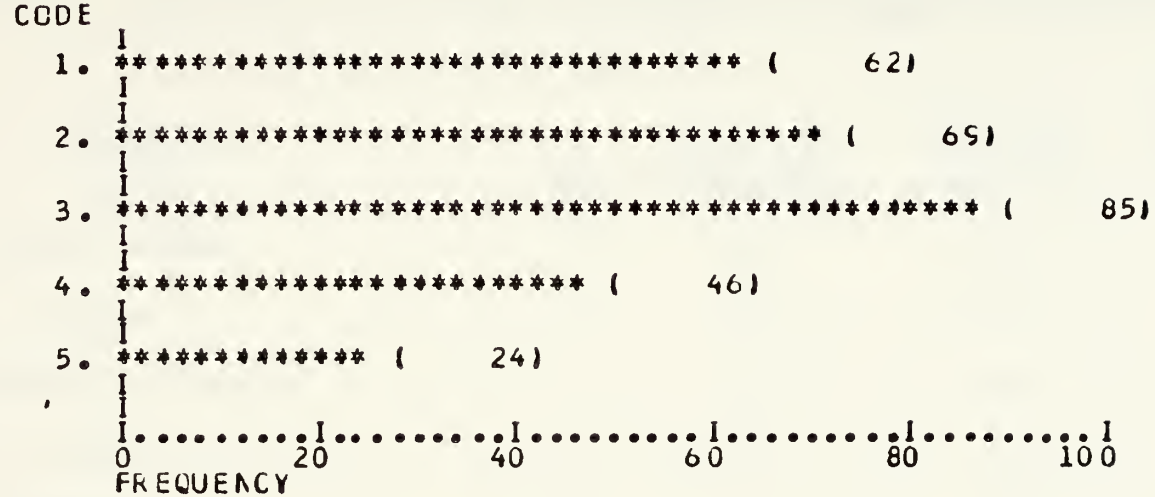
QUESTION 179

IPOBOW Extent of Individuals' Perception as to Being Overworked

Category Label	Code	Absolute Frequency	Relative Frequency Percent	Adjusted Frequency Percent	Cumulative Frequency Percent
To a Great Extent	A	62	21.7	21.7	21.7
Mid.....Scale	B	69	24.1	24.1	45.8
To a Moderate Extent	C	85	29.7	29.7	75.5
Mid.....Scale	D	46	16.1	16.1	91.6
To No Extent	E	24	8.4	8.4	100.0
	Total	286	100.0	100.0	

Valid Cases 286 Missing Cases 0

IPOBOW EXTENT CF INDIVIDUALS' PERCEPTION OF BEING CVERWORKED



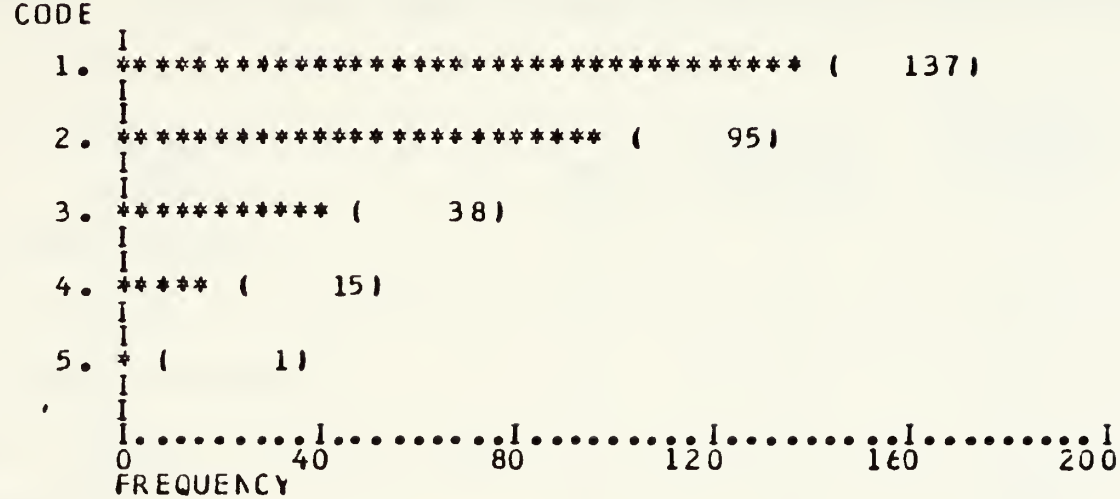
MEAN	2.654	STD ERR	0.072	MEDIAN	2.641
MODE	3.000	STD DEV	1.221	VARIANCE	1.490
KURTOSIS	-0.844	SKEWNESS	0.245	RANGE	4.000
MINIMUM	1.000	MAXIMUM	5.000		
VALID CASES	286	MISSING CASES	0		

IPOPCACG Extent of Individuals' Perception as to Their Overall Productivity Contributing to the Achievement of Command Goals

Category Label	Code	Absolute Frequency	Relative Frequency Percent	Adjusted Frequency Percent	Cumulative Frequency Percent
To a Great Extent	A	137	47.9	47.9	47.9
Mid.....Scale	B	95	33.2	33.2	81.1
To a Moderate Extent	C	38	13.3	13.3	94.4
Mid.....Scale	D	15	5.2	5.2	99.7
To No Extent	E	1	0.3	0.3	100.0
	Total	286	100.0	100.0	

Valid Cases 286 Missing Cases 0

IPOPCACG EXTENT OF INDIVIDUALS' PERCEPTION AS TO THEIR OVERALL PRODUCTIVITY CONTRIBUTING TO THE ACHIEVEMENT OF COMMAND GOALS



MEAN	1.769	STD ERR	0.053	MEDIAN	1.563
MODE	1.000	STD DEV	0.896	VARIANCE	0.803
KURTOSIS	0.393	SKEWNESS	1.031	RANGE	4.000
MINIMUM	1.000	MAXIMUM	5.000		

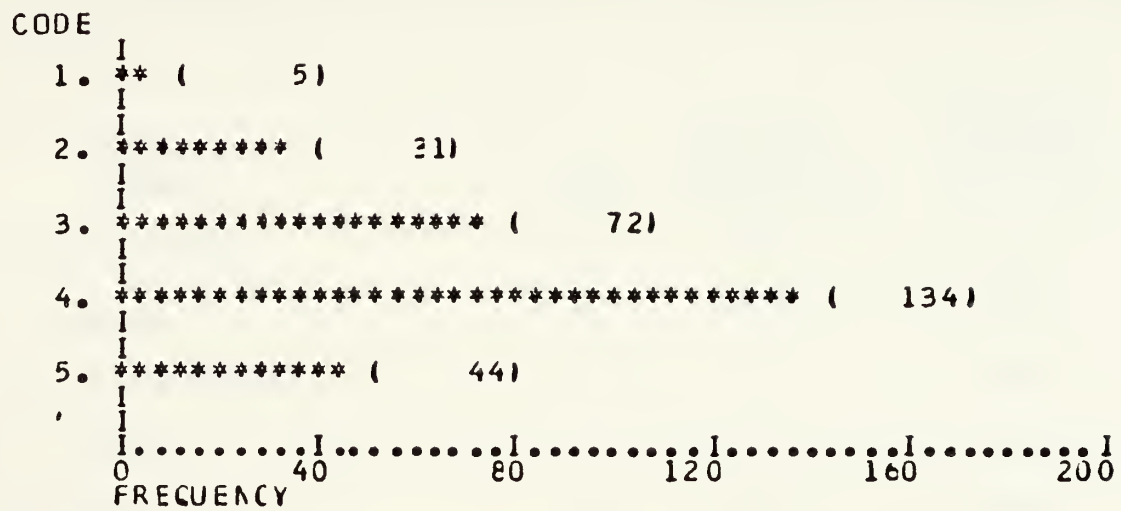
VALID CASES 286 MISSING CASES 0

IPSTADTC Extent of Individuals' Perception as to the Availability of Sufficient Time to Develop Individual Tactical Competency

Category Label	Code	Absolute Frequency	Relative Frequency Percent	Adjusted Frequency Percent	Cumulative Frequency Percent
To a Great Extent	A	5	1.7	1.7	1.7
Mid.....Scale	B	31	10.8	10.8	12.6
To a Moderate Extent	C	72	25.2	25.2	37.8
Mid.....Scale	D	134	46.9	46.9	84.6
To No Extent	E	44	15.4	15.4	100.0
	Total	286	100.0	100.0	

Valid Cases 286 Missing Cases 0

IPSTADTC EXTENT OF INDIVIDUALS' PERCEPTION AS TO THE AVAILABILITY OF SUFFICIENT TIME TO DEVELOPE INDIVIDUAL TACTICAL COMPETENCY



MEAN	3.633	STD ERR	0.055	MEDIAN	3.761
MODE	4.000	STD DEV	0.930	VARIANCE	0.865
KURTOSIS	-0.021	SKEWNESS	-0.551	RANGE	4.000
MINIMUM	1.000	MAXIMUM	5.000		

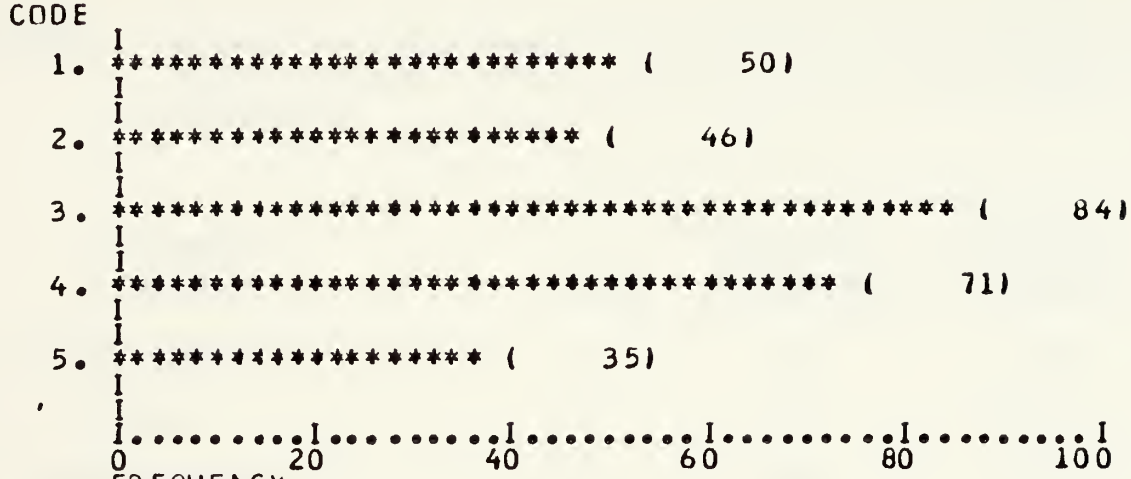
VALID CASES 266 MISSING CASES 0

IPCEDTC Extent of Individuals' Perception as to Whether the Command in Which Assigned Encourages Individual Development of Tactical Concepts

Category Label	Code	Absolute Frequency	Relative Frequency Percent	Adjusted Frequency Percent	Cumulative Frequency Percent
To a Great Extent	A	50	17.5	17.5	17.5
Mid.....Scale	B	46	16.1	16.1	33.6
To a Moderate Extent	C	84	29.4	29.4	62.9
Mid.....Scale	D	71	24.8	24.8	87.8
To No Extent	E	35	12.2	12.2	100.0
	Total	286	100.0	100.0	

Valid Cases 286 Missing Cases 0

IPCEDTC EXTENT OF INDIVIDUALS' PERCEPTION AS TO WHETHER THE COMMAND IN WHICH ASSIGNED ENCOURAGES INDIVIDUAL DEVELOPEMENT OF TACTICAL CONCEPTS



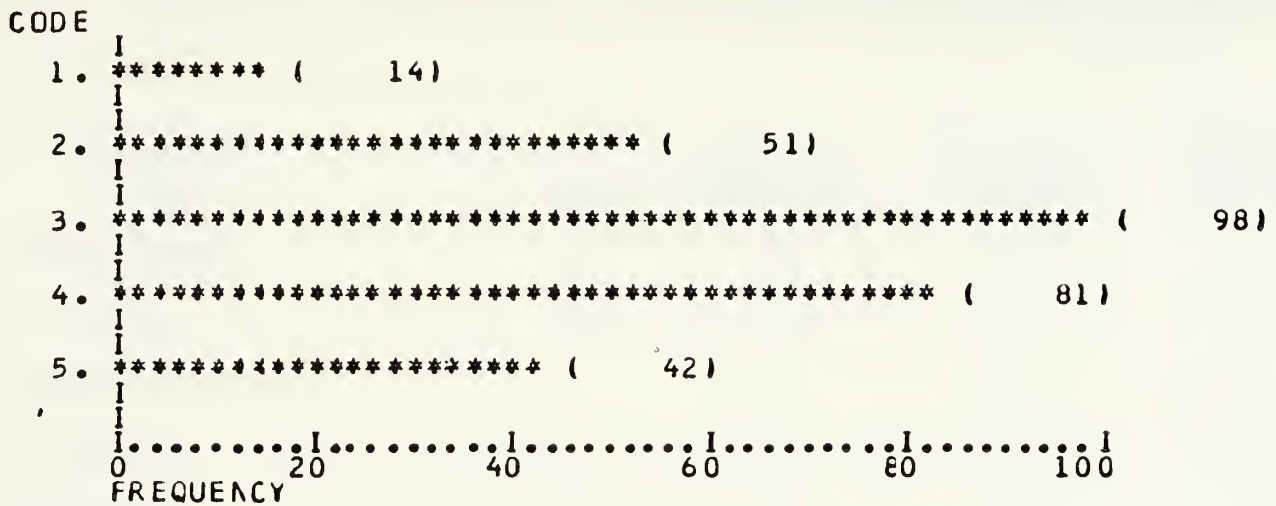
MEAN	2.983	STD ERR	0.075	MEDIAN	3.060
MODE	3.000	STD DEV	1.266	VARIANCE	1.603
KURTOSIS	-0.981	SKEWNESS	-0.124	RANGE	4.000
MINIMUM	1.000	MAXIMUM	5.000		
VALID CASES	286	MISSING CASES	0		

IPCGPDTC Extent of Individuals' Perception as to Whether the Command in Which Assigned Gives Priority to the Development of Tactical Concepts

Category Label	Code	Absolute Frequency	Relative Frequency Percent	Adjusted Frequency Percent	Cumulative Frequency Percent
To a Great Extent	A	14	4.9	4.9	4.9
Mid.....Scale	B	51	17.8	17.8	22.7
To a Moderate Extent	C	98	34.3	34.3	57.0
Mid.....Scale	D	81	28.3	28.3	85.3
To No Extent	E	42	14.7	14.7	100.0
	Total	286	100.0	100.0	

Valid Cases 286 Missing Cases 0

IPCGPDTC EXTENT CF INDIVIDUALS' PERCEPTION AS TO WHETHER THE COMMAND IN WHICH ASSIGNED GIVES PRIORITY TO THE DEVELOPEMENT OF TACTICAL CONCEPTS



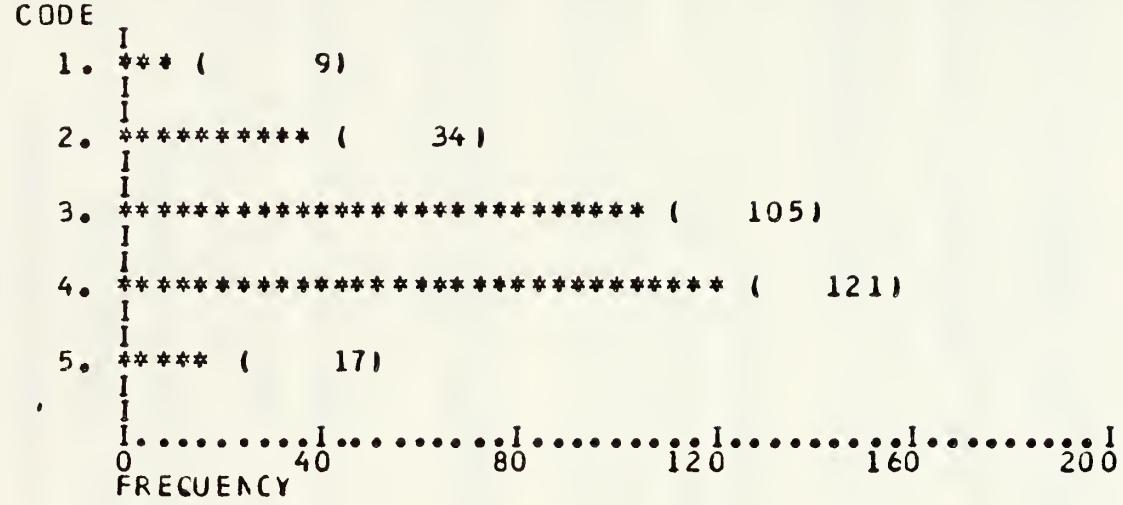
MEAN	3.301	STD ERR	0.064	MEDIAN	3.296
MODE	3.000	STD DEV	1.076	VARIANCE	1.158
KURTOSIS	-0.605	SKEWNESS	-0.146	RANGE	4.000
MINIMUM	1.000	MAXIMUM	5.000		
VALID CASES	286	MISSING CASES	0		

IPNGPDTC Extent of Individuals' Perception as to Whether the Navy Gives Priority to the Developing of Tactical Concepts

Category Label	Code	Absolute Frequency	Relative Frequency Percent	Adjusted Frequency Percent	Cumulative Frequency Percent
To a Great Extent	A	9	3.1	3.1	3.1
Mid.....Scale	B	34	11.9	11.9	15.0
To a Moderate Extent	C	105	36.7	36.7	51.7
Mid.....Scale	D	121	42.3	42.3	94.1
To No Extent	E	17	5.9	5.9	100.0
	Total	286	100.0	100.0	

Valid Cases 286 Missing Cases 0

IPNGPDTC EXTENT OF INDIVIDUALS' PERCEPTION AS TO WHETHER THE NAVY GIVES PRIORITY TO THE DEVELOPING OF TACTICAL CONCEPTS



MEAN	3.360	STD ERR	0.052	MEDIAN	3.452
MODE	4.000	STD DEV	0.882	VARIANCE	0.779
KURTOSIS	0.164	SKEWNESS	-0.525	RANGE	4.000
MINIMUM	1.000	MAXIMUM	5.000		
VALID CASES	286	MISSING CASES	0		

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